Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

August 29, 1960

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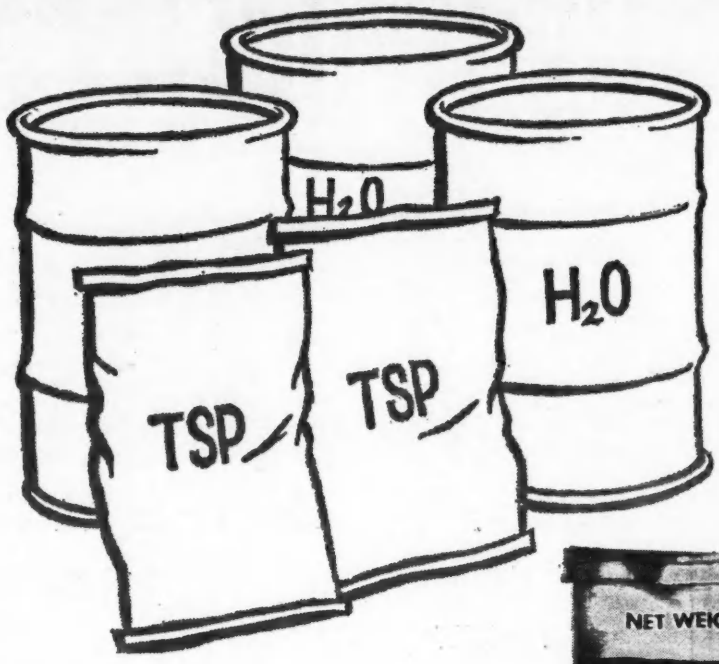

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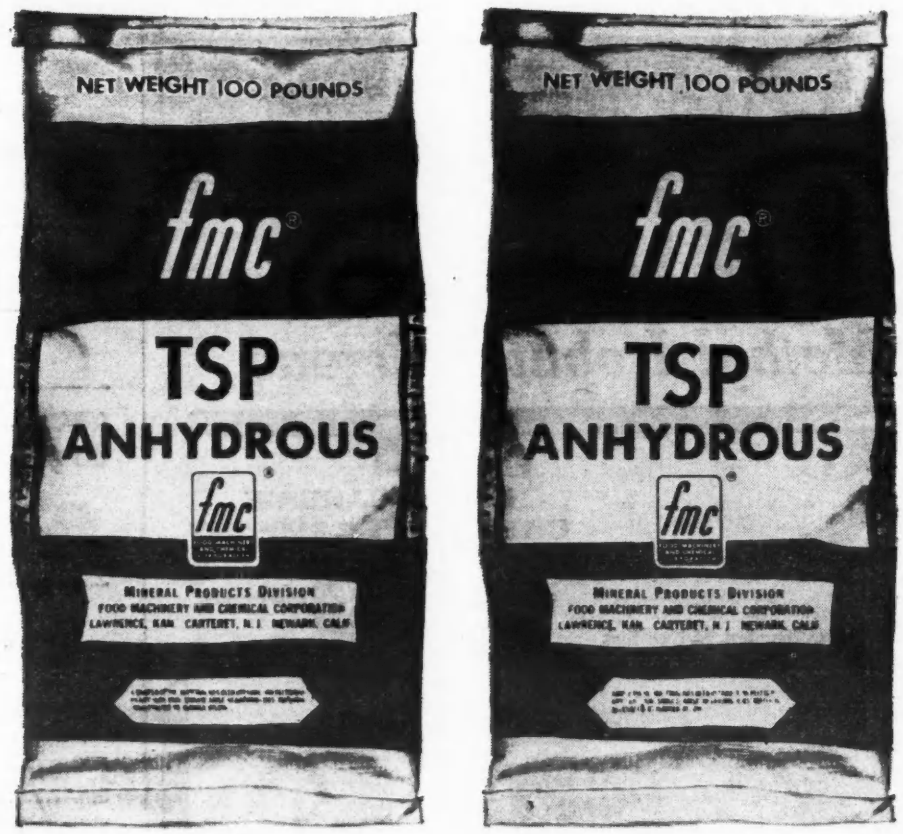

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MOVES UP: Paul W. Neidhardt, elected vice-president and director of Glidden Company, Cleveland, Ohio. He had been general sales manager of the paint division.

Goodrich Plastic Plant Projected for Colombia

B. F. Goodrich Chemical Company, Cleveland, Ohio, is all set to construct a factory in Colombia for the manufacture of "Geon" vinyl plastic materials in cooperation with Colombian participants.

A new company, organized for this purpose, is now being formed.

The factory will be located adjacent to the factory of Planta Colombiana De Soda at Zipaquira, near Bogota. This factory will supply one of the primary raw materials: chlorine.

Construction of the new plant will get underway shortly and production is expected to begin in early 1962. The plant will be the first to produce polyvinyl chloride in Colombia.

Goodrich Chemical received global authorization for importation of the necessary equipment in December, 1959, and since then has been conducting a search for sources of the necessary raw materials. Virtually all Colombian raw materials will be used in the operation and the factory will be large enough to suppiy the entire Colombian requirements for this plastic.

Goodrich Chemical, a division of B. F. Goodrich Company, together with its associate companies abroad, claims to be the largest producer of polyvinyl chloride resin in the world with factories in the United States, United Kingdom, Japan, Mexico, Canada and Brazil. Another factory is currently under construction in Australia.

FDA Gets Spending Money; But Will It Have Enough?

Though Food & Drug Administration is assured of the $16,852,000 it says it needs to run the agency this fiscal year, it may not have the money to administer the nation's newest laws in the chemical and drug fields: color additives and hazardous substances labeling.

FDA's request for a supplemental appropriation of $1.5 million to do the color and labeling jobs was still very much up in the air as OPD went to press.

That's the upshot of a senate-house conference report adopted last week, which also granted FDA another $100,000 for an animal research laboratory and gave the National Institutes of Health $560 million in research funds—$160 million more than President Eisenhowever asked for NIH. The $16.8 million appropriation was not an issue in the conference.

The FDA and NIH appropriations are included in a bill approved by the con-

—Continued on page 47

Aluminum Industry Is Facing Possible Raw Materials Shift: Mine Waste Instead of Bauxite

The aluminum industry here could be in for sweeping changes in raw material base in the foreseeable future. Reason is that North American Coal Corporation will build a 40,000-ton-a-year aluminum sulfate plant at Powhatan, Ohio, with the intention of reducing the sulfate to metal-grade alumina. The big difference between this and other aluminum projects is that North American Coal will utilize coal mine waste as raw material for sulfate production rather than bauxite, the conventional material used for aluminum sulfate or aluminum metal.

Value of development of such a process using domestic materials is illustrated thus: US crude bauxite output in 1959 was 1.7 million tons, while imports of bauxite for consumption here were more than 8.1 million tons.

Jamaica Leads in Shipments

Last year Jamaica shipped 4,189,000 tons to the US; Surinam, 3,071,000 tons; Dominican Republic, 384,000 tons, Haiti, 308,000 tons. But already trouble is looming among these overseas sources of supply.

At last week's meeting of Organization of American States in San Jose, Costa Rica, US Secretary of State Christian Herter called for economic sanctions against the Dominican Republic, and was backed by OAS. Later in the week President Eisenhower asked for legislation enabling cutoff of sugar imports here from the Dominican Republic.

The Dominican Republic, by way of retaliation, could very easily manage to interfere with shipments of bauxite to the US, some trade sources believe.

Furthermore, there is strong feeling in Latin America toward nationalization of industry. This could also affect Haiti. Possibilities appear slim now for any interruption of shipments from Jamaica, Surinam or British Guiana.

Nonetheless, with the political situation in Latin America in its present state of ferment, some observers are not overly optimistic about assurances of future bauxite supplies.

The process of the North American Powhatan plant was developed by the Cleveland, Ohio coal company and Stra-

—Continued on page 50

Potassium Permanganate On Prescription Sale Basis

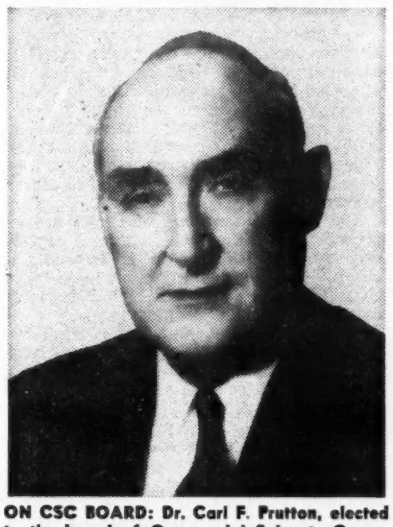
Food & Drug Administration has ruled that potassium permanganate and potassium permanganate tablets should be restricted to prescription sale.

The agency will regard such drug as misbranded when intended for human use unless the label bears the legend: "Caution: Federal law prohibits dispensing without prescription."

A legend restricting potassium permanganate "to sale by or on the order of a licensed veterinarian" is required when the drug is intended for veterinary use.

The agency specifically bars "any preparation of potassium permanganate intended for over-the-counter sale for use

—Continued on page 42



ON CSC BOARD: Dr. Carl F. Prutton, elected to the board of Commercial Solvents Corporation, New York. He is also a director of Food Machinery & Chemical Corporation, and a consultant for several chemical companies.

Heyden Affiliate Starts Building Catalyst Unit

N. V. Transicol, a Netherlands subsidiary of Heyden Newport International Corporation, is starting construction of a new plant to supply the catalyst needs of Europe's sharply growing synthetic rubber production.

So reports Simon Askin, president of Heyden Newport Chemical Corporation, from headquarters in New York. Mr. Askin points out that the new facilities will be located in Geertruidenberg, Holland, at Transicol's existing plant site.

N. V. Transicol, purchased by Heyden Newport early in 1960, is a leading manufacturer of paper size in Holland. Mr. Askin said it "is an important part of our plans to further our manufacturing facili-

—Continued on page 58

Century Chemical Gives The Reins to a New Man

Century Chemical Corporation has chosen a new chief executive officer from the ranks of Stone & Webster Securities Corporation, a brokerage house that has underwritten two of its bond issues.

Emmons W. Blodgett will take the New York chemical company's reins on a "temporary basis" as executive vice-presi-

—Continued on page 42

Sabin's Vaccine: It's A New Target For Drug People

A trio of drug manufacturers is gearing up to produce live polio vaccine now that the Public Health Service has okayed the oral vaccine developed by Dr. Albert Sabin of the University of Cincinnati as "suitable for use in the United States."

Pitman-Moore division of Allied Laboratories, Inc., Indianapolis, Ind.; Chas. Pfizer & Co., Brooklyn, N. Y., and Wyeth Laboratories of Philadelphia—already in the experimental stage—are making the necessary build-up preparations for commercial operations.

Pfizer's Operations Are Extensive

Pfizer reports that it is now producing the Sabin vaccine at a full-scale plant in England and that it plans to apply for a US federal license. Pfizer also manufactures the Salk killed virus polio vaccine in England and in the US.

Eli Lilly & Co., Indianapolis, largest maker of Salk vaccine, is studying the situation, but hasn't yet reached a decision on whether to get into live polio vaccine.

Merck & Co., Rahway, N. J., says it will have to "re-appraise" its recent decision to drop work on the Sabin vaccine in favor of a concentrated effort on the company's newly-developed, more potent form of Salk vaccine.

Two other Salk vaccine makers—Parke, Davis & Co., Detroit, Mich., and Vick Chemical Company, New York—indicate that at present they have no plans to get into the Sabin vaccine market.

Pitman-Moore, Pfizer and Wyeth are making their move with the blessing of Dr. Leroy E. Burney, Surgeon General of PHS, who last week gave the "green light" for the manufacture of Sabin strains I, II, and III.

The Sabin strains were developed with funds provided by the National Foundation and, therefore, will be available to all drug manufacturers who wish to produce the live polio vaccine.

Two other versions of the oral polio vaccine — one developed by Dr. Harold Cox of Lederle Laboratories Division, American Cyanamid Company, Pearl River, N. Y., and another by Dr. Hilary Koprowski, of the Wistar Institute in Philadelphia—failed to get PHS sanction.

Turndown of the Cox vaccine is a particularly hard blow for Lederle, which is the only drug company on file with the government for a commercial license. The Cyanamid division has invested $13 million —$2 million of this for new production facilities—and fourteen years of work on its own vaccine.

However, Lederle is facing the PHS

—Continued on page 37

Kefauver Drug Hearings Get a Change in Line-Up

There's been a change in the line-up of witnesses at the antibiotics pricing hearings, which the Kefauver anti-monopoly committee will launch a week from this Wednesday (Sept. 7).

Dr. Phillip I. Bowman, president of Bristol Laboratories, Inc., Syracuse, N. Y., will replace Frederic N. Schwarz (president of the parent concern, Bristol-Myers) on Sept. 9.

Eugene N. Beesley, president of Eli Lilly & Co., Indianapolis, Ind., will stand in for the company's chairman—Eli Lilly—on the 13th.

There will be one added starter: Dr. Frank L. Meleney of Vinyard Haven, Mass., who has been pencilled in for the final day (Sept. 14) of the new round of drug hearings.

Polyethylene Flash-Fires: Is Another Crisis Due?

Polyethylene producers, nervously remembering the recent plastic bag scare that cost them about $800,000 in a safety-education campaign, are moving fast these days to head off another panic.

The latest fright has to do with the erratic, flash-fire possibilities that are, it suddenly develops, inherent in molded polyethylene products.

Awareness of the plastic's danger—which only breaks out under freak circumstances—came about recently in a fire in a polyethylene waste basket at the University of Minnesota hospital.

Doused with just the right quantity of water (it must be a small quantity) the burning waste basket caused vaporization of the water and a sudden, blinding flash of flames that shot better than twelve feet high.

Knowing that polyethylene containers—bowls, pans, garbage cans, pails, etc.—are to be found in nearly every home and institution in the country these days, the danger in such flash possibilities immediately became apparent to many people. Among them were officials at the hospital, fire department officers, safety experts, and, of course, the plastics industry itself.

The National Safety Council got wind of the accident at the Minnesota hospital. Last week council officials told OPD they had immediately put the wheels in motion for a thorough probe.

The plastics people did not lag. They were quick to take—and are still taking—steps to overcome the danger. Their spokesman—the Society for the Plastics Industry—says they will need more time to lick the problem completely.

The best line of attack, declare the plastics makers, is to reformulate moldable polyethylene so that it is fire-retardant. The difficulty here is that if they make their product fireproof, it becomes difficult to mold. On the other hand, if they

—Continued on page 39

Phillips Adding Facilities For Producing Plastics

Phillips Chemical Company, Bartlesville, Okla., is adding facilities at its plant near Houston, Tex., to raise production of "Marlex" plastics to 100 million pounds annually—an increase of about one-third.

Construction will be finished in several phases so that the company can start supplying the needs of its customers before completion of the entire expansion program next year.

Resin Coating Sales Forecast: A Billion Pounds by '65, If...

Synthetic resin sales to the protective coatings industry could hit a billion pounds by 1965, but not without an assist from new technical and marketing weapons. And these weapons are yet to be forged. To break the billion-pound barrier by the target year, resin makers will have to increase their overall volume by 30 percent, entailing an average growth rate of 45 million pounds yearly. But, with the sole exception of packaging, the major consuming industries for coatings are not explosive type of growth areas that could impel so dramatic a boost.

Here, according to a just-completed study, are factors that will contribute significantly to breaking the one-billion-pound sales barrier.

- Acceptance of several newer coating resins, such as polyurethanes. The latter, which have come on big during the last five years in electrical, industrial, construction, transportation and furniture application, are expected to soar during the next five years.
- A rapid increase in the use of polyethylene for coating paper packages.
- Potential acceptance of colored kitchen appliances by the consumer. The problem of matching the various appliances has so far snagged this growth prospect. Deep freezes could be the first to be marketed in colors since they are usually placed in a separate location.

Growth in the industry's established lines will be roughly as follows, according to the study:

About 5 million tons of metal are expected to be consumed in cans this year, and by 1965 the figure is expected to climb to near 6 million pounds. Vinyl coatings, which are used to line metal cans, would grow proportionally.

The automotive industry, a high volume consumer of alkyd, acrylic and vinyl resin coatings will experience only moderate growth. The industry "may produce about one-half million passenger cars more in 1965 than at present, not taking into account any production increase due to compact cars."

On a dollar volume basis, household furniture sales for 1960 are estimated at

—Continued on page 56

Color Laboratory Flies To the Customer's Door

Cooke Color & Chemical Company, Hackettstown, N. J., has just inaugurated an advance type of customer service: a flying color laboratory.

Designed for the rubber and plastics industries, the company is now providing airplane service which takes to the manufacturer's door quick technical assistance on the Cooke line of specially formulated color dispersions. Edwin Zabowski is head man in the flying lab.

Dyestuffs Production Sparkled Last Year

The coloring business really sparkled in 1959. Production of dyes amounted to 168 million pounds, according to the Tariff Commission, up a glittering 20 percent from the 140 million pounds produced in 1958.

Output of synthetic organic pigments (full-strength toners, reduced toners and lakes), at 42.6 million pounds, was the largest reported for any year since 1955 and 20.3 percent above the 35.4 million pounds produced a year earlier.

Sales in the pigment group amounted to 33.2 million pounds, valued at $65.4 million as compared with 27.8 million pounds, valued at $53.4 million in 1958.

In terms of quantity, organic pigment sales were 19.4 percent larger than in 1958 and in terms of value, 22.5 percent larger.

Production of full-strength toners in 1959 amounted to 32.2 million pounds—23.8 percent more than the output of 26

—Continued on page 58

Reichhold in License Pact With Uruguay Resin Maker

Reichhold Chemicals, Inc., White Plains, N.Y., has signed a license agreement with Compania BAO, S.A., Montevideo, Uruguay for manufacture of resins to be used in the surface coating, adhesive, bonding, laminating, and polyester industries of that country. Compania BOA would market the resins under RCI's trade marks.

In addition to Uruguay, Reichhold has associated plants in five other Latin American countries: Argentina, Brazil, Colombia, Mexico and Venezuela.

Industrial Rayon Reported Talking Merger With Dow

Industrial Rayon Corporation, still losing money steadily under the rigors of rayon-nylon competition for the tire cord market, confirms it is talking mergers with several companies.

A rumor that such discussions are under way with Dow Chemical Company was neither confirmed nor denied by officials of the two firms.

Lending weight to the rumor is the fact that Dow has announced plans to enter the nylon tire cord field with production of nylon 6. The Cleveland, Ohio, rayon company operates a nylon 6 plant at Covington, Va.

Merger plans between Industrial Rayon and Texas Butadiene & Chemical Corporation recently fell through when a minority of Industrial Rayon stockholders threatened to sell out their holdings if the merger was approved.

The Week's Price Change

Grapefruit Oil, Linseed Meal, Soybean Meal, Advanced. Corn Syrup, Furfural, Lard, Vanilla Beans Reduced.

Prices Advanced

Grapefruit oil, 25c. per lb. (p. 48).
Linseed meal, 50c. per ton (p. 55).
Soybean meal, $1 per ton (p. 55).

Prices Reduced

Carnauba wax, yellow, 2c. per lb. (p. 55).
Copra, $5 per ton (p. 55).
Corn syrup, 15c. per cwt. (p. 38).
Cottonseed oil, crude, ½c. per lb. (p. 38). Refd., ½c. per lb. (p. 38).
Furfural, tanks, divd., ½c. per lb. (p. 38).
Geranium oil, Bourbon, 50c. per lb. (p. 48).
Greases, ½c. per lb. (p. 55).
Lard, cash, ¼c. per lb. (p. 55).
Peanut oil, crude, ¾c. per lb. (p. 55). Refd., ¼c. per lb. (p. 55).
Soybean oil, crude, ¼c. per lb. (p. 55).
Tallow, inedible, ¼c. per lb. (p. 55).
Vanilla beans, Bourbon, 50c. per lb. (p. 48). Mexican, 50c. per lb. (p. 48).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER relative record of prices of chemicals related materials is currently as follo

(100=1949 average)

August 26, 1960	August 19, 1960	August 28,
109.60	109.62	109.2

Pesticides Study Stepped Up

With a kitty of nearly 600,000 in research appropriations, Fish & Wildl Service is pushing ahead on a greatly-expanded program to study the relatio ship of pest controllers to animals, birds and fish. Only $280,000 was appropria for the work last fiscal year, but now the Service has received another $317,0 in funds. On top of this, the agency has $700,000 for the erection of a new pes cide-disease laboratory at the Patuxent Wildlife Research Center, Laurel, Md. Construction is due to start in the near future.

The total, however, is only about half the $2,565,000 authorized for the study last session.

What's to be done with new research money? W. W. Dykstra, research staff assistant at the service, says it will mean a major step-up in laboratory and pen studies to obtain added toxicological data on all commonly used pesticides.

Additional species of birds, mammals and fish will be incorporated in the test series and greater research stress will be put on herbicides and fungicides.

Right now, very little is known about the chronic effects of these chemical agents on the survival and reproduction of many forms of fish and wildlife.

The service also intends to work more closely with research chemists and entomologists. More attention will be paid to field testing of new chemicals which show promise of being less hazardous to species other than pests.

Mr. Dykstra reports that there is a

—Continued on page 50

IN SALES POST: Robert W. Montgomery, n sales manager of the Verona Aromatics D sion of Verona-Pharma Chemical Corpora Newark, N. J. Carl Wellenkamp, former s manager, has been granted partial retire at his own request.

Lithium Corp. Asks SEC For an Okay to Sell Bonds

Lithium Corporation of America, New York, has registered a proposed offering of $2.3 million of ten-year convertible subordinated debentures with the Securities & Exchange Commission.

Proceeds of the new issue will be used for the construction of $75,000 facilities for the production of butyllithium and other organolithium compounds, for the purchase of $125,000 worth of mining equipment to reactivate the company's North Carolina mining operations and for liquidation of bank debts.

Dolmetsch Joins NY Ban As Chemical Market Chie

Carl R. Dolmetsch, formerly a vi president of Olin Mathieson Chemi Corporation, has joined the Chase M hattan Bank, of New York, as market director for the chemical industry.

From 1953 to 1957 Mr. Dolmet served with Olin as vice-president of administration for the research and devel ment division.

Index to News and Market Reports

Government News

Bureau of Mines Sets Research..... 63
FDA Requests Additional Funds..... 3
FDA Rules on Folic Acid..... 5
Inland Container Hits FTC Charge..... 56
Kefauver Hearings Line-Up Changed.... 3
Lithium Seeks Approval for Bond Sale. 4
Olin Unit Wins SEC Exemption..... 50
Pep Pills Pelted by FDA..... 5
Pesticides Study Accelerated..... 4
Potassium Drug on Prescription Basis.... 3
Tax Relief Bill Chances Dim..... 62

Industry News

Aetna Has New Product List..... 47
Alkylation Unit Contract Let by Amoco. 5
Aluminum Raw Material Shift Seen..... 3
Barlow Adds to Resin Line..... 7
Brush Beryllium Reorganizes..... 36
Carbon Dioxide Liquid Use Gains..... 42
CMRA Fall Meeting Theme Set..... 7
Color Lab Flies to Customer..... 4
CSC Elects Prutton to Board..... 3
'Curon' Plastics Line Goes to Reeves.... 7
Dyestuff Production: 1959..... 4
Hepatonic Bill Gains..... 42
Industrial Rayon, Dow Talking Merger?.. 4
Maleic Unit Slated..... 7
Monsanto Marketing Growth Regulator.. 62
Natural Rubber Duplicate to Be Licensed. 36
Oxygen Looks Like a Winner..... 7
Phillips Adding to Plastics Unit..... 3
Plastics for Medicine Entice Producers... 5
Polyethylene Facing New Crisis?..... 3
Resin Coating Sales Forecast..... 4
Roden Named Agent..... 36
Sabin Vaccine Output Planned..... 3
Shell Unveils Two Solvents..... 5
Soda Ash in Cost Price Squeeze..... 5
Textron's New Unit Drug—Oriented..... 5
UBS, Permutit in Joint Venture..... 7
Union Carbide Producing 'Ucar Hexa'.... 47

International News

Celanese Starting-Up Nylon Unit..... 5
Elections in US Stir Talk Abroad..... 5
Fertilizer Use in Europe Reported..... 7
Goodrich Plastics Slated for Columbia.. 3
Heyden's Dutch Unit to Make Catalyst. 3
Reichhold, Uruguayan Firm Ink Pact.... 4
Soda Ash Output Charted..... 5
Tin Returns to Free Market..... 7
Vanilla Controls Rejected by Madagascar 5

Personnel News

AMSCO Appoints Newman..... 7
Dolmetsch Joins Chase Manhattan..... 4
Enjay Names Miller..... 5
Foy Paint Elects Fox..... 7
Glidden Elects Neidhardt..... 3
Houston Chemical Names Young..... 36
Jobs and People..... 47
Pharmacy Organization Man Retires.... 47
Texas Butadiene Appoints Porter..... 5
Verona-Aromatics Names Montgomery. 4

Market Reports

Acids..... 34
Agricultural Chemicals..... 43
Aliphatic Organics..... 38
Antioxidants..... 57
Aromatic Chemicals..... 48
Botanical Drugs Gums..... 46
Chemical Specialties..... 57
Coal Chemicals..... 40
Coatings Materials..... 52
Drugs..... 44
Essential Oils..... 48
Fats & Greases..... 56
Fertilizer Materials..... 43
Fine Chemicals..... 44
Heavy Chemicals..... 34
Industrial Organic Chemicals..... 38
Metals, Nonferrous..... 34
Naval Stores..... 53
Oil Cake and Meal..... 56
Oils..... 55
Paint Materials..... 52
Pesticides..... 43
Petrochemicals..... 38
Petroleum Derivatives..... 51
Protective Coatings Materials..... 52
Spices..... 50
Trade Name Chemicals..... 57
Waxes..... 56

General Features

Advertisers' Index..... 63
Association Meeting Dates..... 7
Bids Wanted..... 58
Bookshelf..... 9
Classified Advertisements..... 62
Coal Chemical Output..... 51
Crude Oil Stocks..... 40
Current Market Quotations..... 10
Editorials..... 9
Imports..... 54
Jobs & People..... 47
Obituaries..... 42
OPD Price Index..... 4
OPD Reports from Europe..... 5
Washington Talks It Over..... 9

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'Pep Pills' Pelted by FDA

Food & Drug Administration is now up with a progress report on its drive to stamp out the bootlegging of "bennies," "pep pills" and "co-pilots"—known more prosaically to the drug trade as amphetamines.

When the campaign to curb illegal sales of the stimulant pills to truck drivers and motorists was launched last fall, the agency had more than 200 cases under investigation.

Since that time, says FDA Commissioner George P. Larrick, this is what's been done:

- Eighty-five criminal prosecutions have been completed.
- Thirty-one additional criminal prosecutions have been instituted and are now pending in federal district courts.
- In eight separate actions, 1,837,000 tablets and capsules of amphetamine drugs have been seized.

Forty-six of the terminated cases and twelve of those still pending were brought against individuals and establishments not authorized to dispense dangerous drugs, catering especially to truck drivers. These include truck stops and their operators, grocery stores and other peddlers.

Most of the other cases were brought against retail drug stores for selling these drugs either without a prescription or without authorization from the physician for refilling the prescription.

Three of the terminated cases involved licensed practitioners who dispensed the drugs without having established a bona fide doctor-patient relationship.

Some 63,000 pounds of amphetamines are produced annually in this country—enough to make about 5.6 billion 5 milligram tablets.

Says Commissioner Larrick: "It seems likely that a large part of the market for these drugs is through illicit channels."

—Continued on page 63

Plastics for Medicine and Dentistry Prove a Lure to the Big Producers

Medical and dental plastics, heretofore thought to be just small fish in a big sea, are coming in for increasing attention from chemical makers. Four major companies already have their hooks firmly in the business and othere are casting out lines for what promises to be a surprisingly satisfying fry. The four firms —cited in a just-published survey—are American Cyanamid Company, E. I. duPont de Nemours & Co., Rohm & Haas Company, and Minnesota Mining & Manufacturing Company.

DIVISION EXECUTIVE: G. W. Miller, named assistant manager of the new plastics and resins division of Enjay Chemical Company, New York.

The last-named firm, coincidentally but not without significance, is just now reported to be negotiating to absorb Warner-Lambert Pharmacal Company. Trade sources are wondering if 3M's extensive plastic tape business and Warner Lambert's drug business don't add up to medical plastics.

The 'Best-Suited' Manufacturer

For, according to findings in the survey, "a manufacturer is best suited to sell medical and dental grade plastics when it is integrated vertically far enough up the ladder to supply the specialty medical product in either a finished or semi-finished form." 3M fills that bill.

The survey, titled "Plastics in Medicine and Dentistry" has been put together by Chemical Marketing & Research Company, a New York consulting firm.

Here are figures the consultants use to back their contention that "these profes-

—Continued on page 62

Celanese Covers Bet In Rayon-Nylon Fight

Like other fiber manufacturers, Celanese Corporation of America has chosen to hedge its rayon bet by adding production facilities for nylon tire cord. Celanese Mexicana, S.A., an affiliate of the New York-based company, will start up a 2,000-ton-a-year plant during the first quarter of 1961. The production,

—Continued on page 62

Vanilla Crop in Madagascar Won't Be Gov't-Controlled

The Madagascar government has turned down a proposal to set a price floor and export quota on vanilla. The Caisse de Stabilisation de Vanille in Tanarize was considering the possibility of creating a floor price of $20 per kilo, f.o.b., and an annual export quota of 450 tons.

Turndown of the proposal means that the Madagascar vanilla crop, about 80 percent of the world's supply, will remain free of government controls. However, the government will levy a 60-cent-per-kilo tax on exports of the 1960-crop, which will be marketed starting January 1, 1961.

Soda Ash Industry Corseted By Cost-Price Squeeze in Face Of Rising East Bloc Capacity

Demand for soda ash in this country and abroad is active, but prices are low. Need for expansion here is recognized, but cost of new Solvay process plants to produce synthetic ash are prohibitive because of narrow profit margins. One possible answer to the cost-price squeeze here may be in the hands of Food Machinery & Chemical Corporation and Stauffer Chemical Company. FMC has been processing natural soda ash (trona) at Green River, Wyo., for ten years in a 520,000 ton-a-year plant. Stauffer is considering building a $20 million plant in the same area. Diamond Alkali Company and Allied Chemical Corporation are exploring in Wyoming as well.

Soda Ash World Growth*

	1959	1953
FREE WORLD:		
Africa	110,000	136,000
Australia	95,000	50,000
Austria	152,500	122,000
Belgium-Luxembourg	180,000	170,000
Britain	1,400,000	1,400,000
Canada	260,000	175,200
France	777,000	724,400
Colombia	17,000	12,400
India	20,000	20,000
Italy	491,000	471,900
Japan	775,000	645,200
Mexico	80,000	53,700
Netherlands	100,000	.....
Norway	19,000	12,800
Pakistan	20,000	20,000
Portugal	31,800	31,800
Taiwan	4,500	1,700
West Germany	999,000	983,100
USA	5,091,000	5,076,000
Total	10,622,800	10,106,200
COMMUNIST BLOC:		
Bulgaria	104,000	70,600
Czechoslovakia	90,000	89,000
East Germany	559,000	455,500
Poland	447,400	206,600
Red China	650,000	400,000
Rumania	106,000	51,000
USSR	1,700,000	1,365,000
Yugoslavia	91,800	39,200
Total	3,748,200	2,667,900
World Total	14,371,000	12,764,100

* Metric tons.

But where chlorine and caustic soda have pressed upward at a strong pace during the last several years, soda ash has had its problems. Average rate of gain per year for ash amounts to around 4 percent, compared with caustic (7.2 percent a year) and chlorine (13 percent a year).

—Continued on page 63

FDA Finalizes Proposal On Folic Acid Regulation

Food & Drug Administration has made final its proposal of last month (OPD, 7/8/60) to classify vitamin preparations containing more than 0.4 milligrams of folic acid per daily dose as drugs which must be labeled for sale only on prescription.

FDA says that existing stocks must be relabeled promptly, but that a reasonable time will be allowed before taking court action to enforce the ruling.

Under the ruling, preparations furnishing 0.4 milligrams or less of folic acid daily will be permitted to be sold over the counter until March 6, 1961.

After that date these vitamin products may continue to be sold without prescription if only satisfactory proof of safety for the intended use is submitted in a petition as required under the food additives law.

JOINS NEW FIRM: Richard P. Porter, made sales administration manager by Texas Butadiene & Chemical Corporation, New York. Previously he had been with Innis, Speiden & Co.; Ethyl Corporation and American Cyanamid Company.

Shell Is Introducing High Boiling Solvents

Shell Chemical Company has started up commercial production of two high boiling point solvents which the company describes as forming a "new class of chemicals" for use in the surface coating industry.

The materials—a keto-ether called "Pent-Oxone" and a glycol-ether called "Pent-Oxol"—are said to combine the superior solvent properties of currently available ketones and glycol ethers.

Films deposited from these solvents reportedly have excellent gloss and extreme smoothness, thus requiring less rubbing.

Prospective end-uses for the solvents are in automotive and furniture finishes, and in vinyl lacquers. According to the company, tests indicate potential use as

—Continued on page 47

Textron's New Subsidiary To Move Into Drug Fields

Textron, Inc., has set up a pharmaceutical subsidiary, Textron Pharmaceuticals, Inc., to operate in the ethical and proprietary drug fields.

Robert E. Grant has been appointed president of the new subsidiary, with headquarters in Providence, R. I. Purpose of the unit is to explore the possibility of acquisition in the drug industry.

Alkylation Contract Let For a Giant Installation

American Oil Company, set to build what it calls the world's largest alkylation unit at its refinery in Texas City, Tex., has just awarded the construction contract. It goes to Fluor Corporation, Ltd. The unit will convert refinery feed stocks into 14,600 barrels per day of alkylate.

M. W. Kellogg already has been awarded another contract—this one for a 150,000-barrel-a-day crude unit, also said to be the largest in the world, and a 47,600-barrel-a-day catalytic cracking unit.

The three new units will replace six refinery units now in existence.

OPD Reports From Europe

Election in the US: Europeans Expect to Lose It

Some European chemical men, with big stakes in the US market, have the Presidential election all figured out, and they see themselves as losers every time.

The reasoning is simple. It's based on a growing European belief that no matter which party wins the White House, or what the platforms say, there will be a resurgence of protectionism in American politics and laws.

Almost any well-informed French, German or British chemical industry executive is able to cite evidence for his belief in this trend.

The deterioration of US balance-of-payments since 1958 is an oft-cited piece of evidence. Europeans fear that this financial and economic factor will make the business - labor protectionist pressure stronger.

S. P. Chambers, chairman of Imperial Chemical Industries, Ltd., the largest chemical company outside the US, comments carefully that in view of the balance-of-payments problem "clamor to protect American industry from foreign imports whose low prices are due mainly to lower wages is bound to have popular support in Washington."

One French political commentator believes that both Vice-President Nixon and Sen. Kennedy will oppose any "vetour au protectionisme" in American trade policy, but he doesn't expect their opposition to decrease the pressure or to be very effective.

Another common proof consists of quoting American labor leaders, under pressure from their membership because of foreign imports. This type of thing has led Europeans to expect Big Business and Big Labor to get together on at least one policy: Reduction of imports.

A recent French management publication featured prominently a statement by A. J. Hayes, president of the Association of Machinists. This publication quotes

—Continued on page 46

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IN NEW POST: John E. Newman, appointed eastern manager of sales development for American Mineral Spirits Company, Chicago. He has been with Amsco since 1952.

Maleic Unit Slated; To Use SD Process

An 8 million-pounds-a-year maleic anhydride plant has been slated for construction at Ohmuta City, Kyushu, Japan, by Miike Gosei Chemical Industry Company, Ltd. The unit will use a Scientific Design Company process involving the fixed-bed, catalytic, air oxidation of benzene.

Scientific Design, in addition to complete process design, will help Miike Gosei in setting standards and specifications, with design of the plant and equipment, and will assist during project engineering, construction and operation.

Miike Gosei is reportedly the thirteenth company to employ SD's maleic anhydride process, and the first such plant in Japan. The new plant will bring the total capacity of SD-designed maleic anhydride plants to over 60 percent of the entire world's capacity, according to SD.

Scientific Design also announced that it has completed Monsanto Chemical Company's 20 million-pound-a-year expansion project, using the SD maleic anhydride process. The new Monsanto unit is reported onstream and operating satisfactorily. Monsanto's maleic capacity now totals 60 million pounds a year.

CMRA Fall Meeting Theme; Europe's Chemical Industry

Chemical Market Research Association has chosen "The European Chemical Industry" as the topic of its fall conference, September 22-23, at Wentworth-by-the Sea, Portsmouth, N.H.

Speakers from four major European chemical interests will discuss the chemical industry in their home countries. They are H. G. Sinkel, Chemische Werke Huls, Germany; John Townsend, Imperial Chemical Industries, Ltd., England; Guilio Ballabio, Montecatini, Italy; and Jacques Roche, Union of Chemical Industries, France. The speakers will be introduced by program chairman Roger Williams, president of Roger Williams Technical & Economic Services.

Oxygen Looks Like a Winner To the Men Who Back Hunches With Huge Outlays for Plants

How can oxygen lose? The men who produce it, barely visible behind that stack of blue chips, are betting that it won't. In fact, they're plunging. Business & Defense Services Administration reports that plant expansions and new plants authorized as of May 15 will drive the industry's capacity to 115 billion cubic feet of gas by January, 1962—up a whopping 66 percent in only two years. Backing up that bet, BDSA notes, are some of the highest stepping outlets in the chemical world. Among them: Steel, the backbone of industry; acetylene, plastics raw material No. 1; aviation supplies, representing the wave of the future.

Oxygen production in industry-owned plants reached 3,275,000 million tons last year, according to the BDSA survey—up 2.5 times since 1954. And this does not include output from government-owned plants which supply gas for missiles and other uses.

Aviation Outlets Using More

Among end-uses for high purity oxygen, steel production accounted for some 71.6 percent as of 1958. A year earlier steel's share was 72.9 percent. Aviation outlets accounted for 5.9 percent in 1958, as compared with only 3.4 a year earlier. This is the fastest expanding application, BDSA' report indicates.

Total production of lower purity oxygen is reported by the Bureau of the Census for the years 1957, 1958 and 1959 at approximately 1,149,000; 1,112,000; and 1,399,000 tons, respectively, all of which was piped directly from the producers' generator to use-sites.

In 1957, about 35 percent of this low-purity material was consumed in producing acetylene, ethylene oxide, aldehydes and ketones, nitrosyl chloride and other organic chemicals.

The remainder went principally into steel, and to a small extent into captive miscellaneous uses.

As of mid-1960, twenty-five companies operating fifty-eight plants were producers of liquefied oxygen, all high-purity-grade, BDSA reports. Their combined annual capacity of approximately

—Continued on page 37

UBS Chemical, Permutit Enter a Polymer Venture

A joint venture for production and distribution of "Ubatol" brand polymer emulsions has been undertaken by UBS Chemical Company, Cambridge, Mass., and Permutit Company, Ltd., London, England. UBS is a division of the A. E. Staley Manufacturing Company, Decatur, Ill.

The synthetic polymer products will be produced at Permutit's chemical works in Ponty Clun, Glamorgan, South Wales, for distribution to the floor polish industry throughout the United Kingdom and European continent.

A pioneer manufacturer of polymer emulsions for the floor polish industry, UBS has developed a full line of emulsions under its "Ubatol" trademark during the past seven years.

Permutit, a major producer of water treatment equipment and ion exchange resins, will share its manufacturing capabilities with UBS when facilities now being erected begin polymer emulsion production.

HEADS FAMILY FIRM: Edward A. Foy, formerly executive vice-president of Foy Paint Company, Cincinnati, Ohio, elected president of the company. James J. Foy has been made operations vice-president.

'Curon' Plastics Line Sold to Textile Maker

The "Curon" plastic products business of Curtiss-Wright Corporation has just been bought up by Reeves Brothers, Inc., a big New York-based textile manufacturer. The transaction involves about $1 million in cash.

"Curon's" volume of business this year, trade sources estimate, is running between $8 million and $10 million. Reeves, which does a business of about $61 million annually, says it hopes to expand "Curon" sales to two or three times the present rate over the next few years.

"Curon" is a multicellular foam plastic made principally from an isocyante chemical. In the textile business, it is used as a foam plastic in quilted interlining and as a laminate in various "Shell" fabrics for outerwear and other types of apparel.

Acquisition of the "Curon" line includes all machinery, inventory, sales contracts and patents connected with the plastic.

—Continued on page 58

Tin in Free Market

Tin will return to a free market on October 1. The International Tin Council in London last Friday lifted export controls from the metal for the first time since 1957.

Fertilizer Spread At Greater Depth On Europe's Soil

On the basis of acres of agricultural land, Western Europe uses on the average slightly more than four times more fertilizer than does the United States—forty-nine pounds of plant foods per acre for its 368 million acres of farmland. The US average is only twelve pounds for its 1.1 million acres.

So reported Dr. Willard H. Garman, chief agronomist of the National Plant Food Institute, last week at the annual Canadian Fertilizer Association conference in Murray Bay, Quebec, Canada.

Estimates for the Optimum

Organization for European Cooperation, he notes, has estimated the economic optimum rate of plant food use for a half-dozen countries on the continent.

In Belgium, for instance, the present use of plant food amounts to an average of 180 pounds on each acre of agricultural land. For Belgium to hit its optimum rate, it would need to use 220 pounds per acre—or to increase its plant food consumption by 22 percent.

"So," Dr. Garman comments, "one might say that Belgium does not have very far to go, under present economic and agricultural marketing conditions, before it reaches its optimum potential in fertilizer use.

"In Denmark, Sweden and the United Kingdom," he continues, "the potential is increasingly greater in terms of percentage change required to reach the optimum level.

"It is interesting to note that the optimum figures for these countries—namely, 142, ninety-five and seventy-eight pounds of plant food to the acre—are appreciably less than the present rate of 180 pounds to the acre in Belgium."

The optimum potential for France, he reports, is "a whopping 255 percent increase."

Holland, however, is already using fertilizer beyond its estimated optimum amount. "If the farmers in Holland were producing agricultural products at the most economic point," Dr. Garman observes, "they would be using 7 percent less fertilizer."

While there apparently is not a very good future for expansion of the fertilizer industry in Holland, the NPFC official points out that the country "is steadily reclaiming land from the North Sea" and, as a result, "will continue to be an increasing market for plant foods."

Barlow Adds Polyurethanes To Line of Resin Products

Barlow Chemical Corporation, Ossining, N. Y., has completed another phase of its continuing expansion program with the installation of facilities to produce polyurethane coatings. The products will be marketed under the "Barcoat" tradename.

Available will be two formulations: a leather coating which produces a finish similar to that of patent leather with reportedly good flexibility, scuff and abrasion resistance; and a wood finish.

Association Meetings

Air Pollution International Congress, New York, September 10-11.

American Association of Textile Chemists & Colorists, national convention, Sheraton hotel, Philadelphia, October 6-8.

American Chemical Society, national meeting, New York, September 11-16.

American Council of Independent Laboratories, annual meeting, Deauville hotel, Miami Beach, Fla., October 11-15.

American Institute of Chemical Engineers, May hotel, Tulsa, Okla., September 25-28.

American Oil Chemists' Society, fall meeting, New Yorker hotel, New York, October 17-19.

American Tung Oil Association, annual convention, Edgewater Gulf hotel, Edgewater Park, Miss., September 28-29.

Armed Forces Chemical Association, annual meeting, Sheraton-Park hotel, Washington, D. C., September 15-16.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Shelburne hotel, New York, October 25.

Canadian Agricultural Chemicals Association, annual meeting, Britannia hotel, Lake of Bays, Muskoka, Ontario, September 12-14.

Canadian Manufacturers of Chemical Specialties Association, annual meeting, Queen Elizabeth hotel, Montreal, Que., Canada, October 24-26.

Chemical Institute of Canada, western regional conference, Regina, Sask., September 8-10.

Chemical Market Research Association, Wentworth - by - the - Sea, Portsmouth, N. H., September 22-23; Pittsburgh Hilton hotel, Pittsburgh, Pa., November 9-10.

Drug, Chemical & Allied Trades Association, annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 15-18.

Electrochemical Society, Shamrock hotel, Houston, Tex., October 9-13.

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Gordon Research Conferences; cancer, Colby Junior College, New London, N. H.; adhesion, New Hampton School, New Hampton, N. H.; high-temperature chemistry — kinetics of vaporization and condensation processes, Kimball Union Academy, Meriden, N. H., August 29-September 2.

National Agricultural Chemicals Association, annual meeting, Del Coronado hotel, Coronado, Calif., September 27-29.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 16.

National Foreign Trade Council, national meeting, Waldorf-Astoria hotel, New York, November 14-16.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

Packaging Institute, annual national packaging forum, Statler-Hilton hotel, New York, October 31-November 2.

Parenteral Drug Association, annual convention, Statler hotel, New York, October 19-21.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, November 14.

Society of the Plastics Industry, New England section conference, Wentworth-by-the-Sea, Portsmouth, N. H., October 13-14.

Stanford Research Institute, symposium on chemical reactions in the lower and upper atmosphere, Mark Hopkins hotel, San Francisco, April 18-20, 1961.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, September 13.

Toilet Goods Association, scientific section's winter meeting, Waldorf-Astoria hotel, New York November 30.

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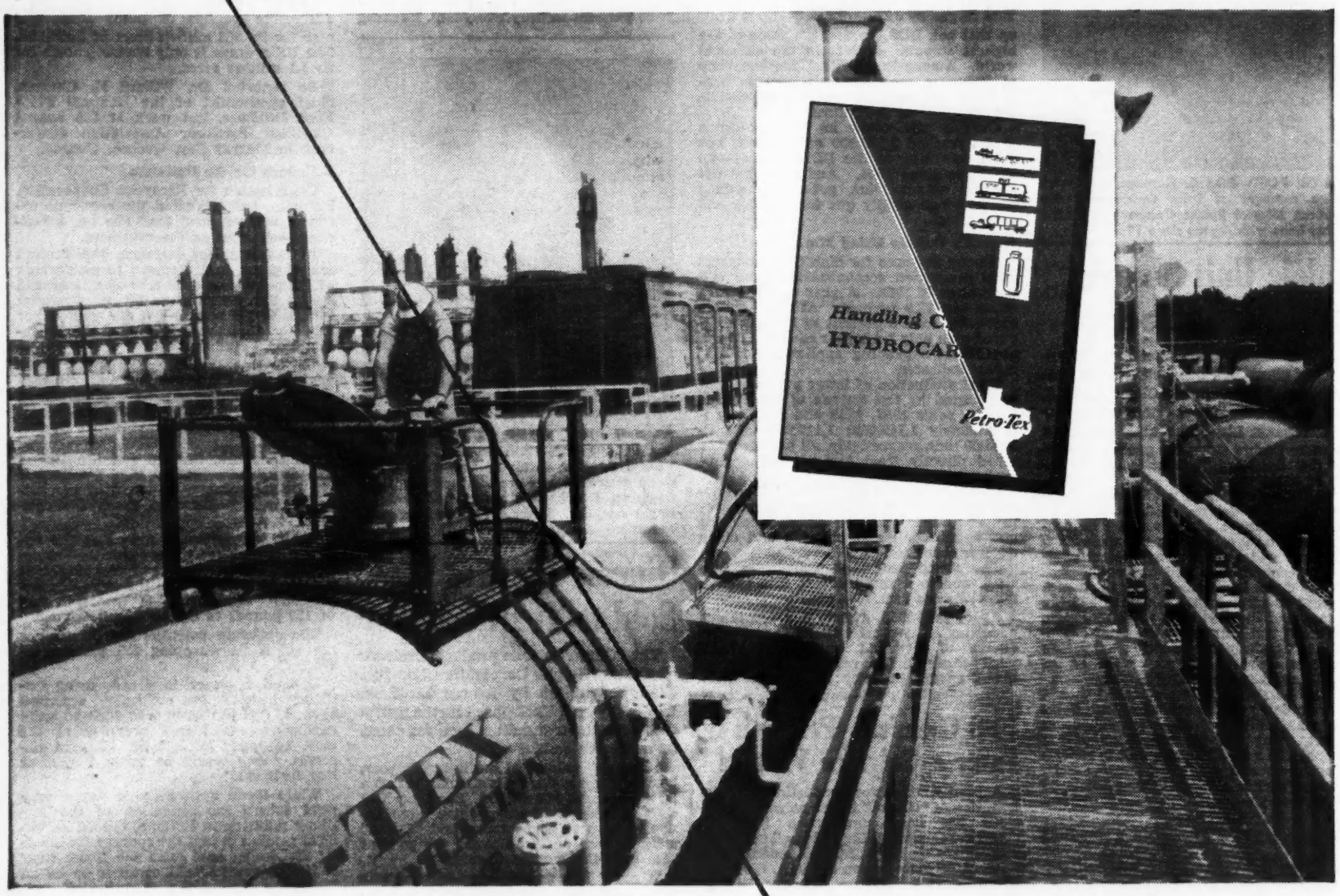

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Latin-American Salt

Several months ago, in a British report that production of salt and gypsum in the Dominican Republic was undergoing expansion development, it was said that all the 60,000 tons of salt then being exported annually was being sent to the United States. Does that mean that this country will be getting that much less salt now that trading with the Dominicans has been given a taboo by the Organization of American States?

Three months ago, it was reported in *Foreign Commerce Weekly* that a source of salt suitable as a raw material constituted a problem in Ecuador in view of the breakdown of the refinery operated by the government monopoly. The report went on to say that plans were under way for the establishment of a new salt operation "including a possibility of divestment by the government of the salt monopoly to private enterprise."

Source of the report was a US chemical team that had made a survey of investment potentials in Ecuador. Among other findings was that the prospect of establishing a caustic soda and chlorine facility was feasible and promising, although markets for its products other than caustic soda were at present small. The feasibility was based on the placing of all construction and operating expenses against the soda, the byproduct chlorine, hydrochloric acid, bleach, and hydrogen being given no value, in keeping with a Latin-American practice of considering them as waste until markets have been developed.

The chemical team was composed of men with more than passing acquaintance with and experience in various aspects of professional and industrial chemistry. It reported that an anhydrous ammonia operation in Ecuador was not feasible because of insufficient raw material and a limited marketing outlook.

The team did, however, suggest as a first step toward an Ecuadorian chemical and fertilizer industry the manufacture of ammonium sulfate in connection with a sulfuric acid plant. It found that sufficient power for a good start was available in at least three locations, with a very attractive rate in one of them. Its conclusion with respect of salt was that "it should not be difficult to obtain adequate quantities for industrial purposes at reasonably satisfactory prices."

Copies of the team's informative report may be obtained without charge from the trade development division of the Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D.C. So can desired additional information. And Latin-America is a very promising region of natural and potential resources, into which chemical money can be advantageously "poured."

Frauds Are Bilateral

The grand jury which has been investigating "irregularities" in the "purchasing" of rock salt for use in snow removal in New York City is to meet again early in September. The city purchasing agent charged with rigging in the salt buying has resigned—at request. It is a big topic in guessing what the grand jury will do with reference to him, and a bigger one on whether it will do anything with reference to the seller who was the gainer via the rigging.

That question comes up in connection with reports of senate investigations of government's alleged paying of $29 for a wrench sold for $3.89 in "dime stores," $21.10 for ordinary 25-cent lamp sockets, and so on.

Certainly the crook who profits is at least as guilty as is the one who enables him to do so; why shouldn't he be penalized? Of course, there are such things as cutting a caught crook off a bidding list—but he can and does change his name and address—and pulls the same old game.

It is time that somebody took proper notice of the asking by labor publications what are the responsibilities of businessmen, business firms, and business organizations in relation to crookedness in buying-selling relations and why they aren't exercised. Something should be done about it. There certainly is nothing ethical about either side of such deals. Somebody is going to be pushed or lured into a legislative endeavor to provide a means of legal redress for defrauded stockholders—and taxpayers. Business should sponsor the launching.

Business with France

It is steadily becoming recognized—somewhat as a matter of necessity—among industrial and commercial groups in the United States that mutually satisfactory business relations between the peoples of two countries must comprise much more than mere trade. That is why there was an informatively interesting article on page 3 of OPD last week, with the heading—"US Chemical Money Pours into France for Sales Offices, Plants, and Joint Ventures." It also had more than a little to do with the appearance on page 3 of *Foreign Commerce Weekly* for August 15 of a report by the US embassy in Paris, under the national export expansion program, with this heading—"US Businessmen 'Not Export-Minded' Survey of French Market Shows."

A studious economic explorer who has read the embassy's report has no difficulty in getting the significance of the move from long-distance wholly commercial practices to a neighborhood combination of industrial and commercial activities, both financial and operational. He would be especially impressed in that connection by one thing that the embassy survey disclosed: "Importers and dealers interviewed generally were critical of US manunfacturers' sales promotion programs. All too often, they claim, US brochures and sales literature are not printed in the language of the country in which the product is to be sold. American businessmen should take a cue from other European sellers in the French market . . . who have done an excellent job in providing sales literature which the potential French customer can read in his own language."

All who are in any way interested even in trade with France may be somewhat surprised—but can be much encouraged—by reading in the embassy report that "US prices are not obstacles to expanded sales abroad." They can find considerably more encouragement in an article on "How to Increase Franco-American Trade," by a US commercial attache who is a consulting director of the American Chamber of Commerce in France, which was published in two parts in the June and July issues of that organization's official bulletin. Particularly timely and pertinent in these days of leaning more and more upon government is what the attache has to say in connection with his reference to the government's encouragement and facilitation of private endeavors to expand exports: "It is always taken into account that the most important work falls on free enterprise of the American exporters and their representatives abroad. This comment applies both to our companies which have already established agencies abroad and to those which are just beginning to do foreign trade in a given country."

Business relations differ from trade relations in being more sociologically complex. That is especially true with respect to those with peoples of another country, in a different social and cultural milieu. That is why it is interesting to know that the official Canadian publication, *Foreign Trade*, says that "The Executive Abroad," a book by John Fayerweather (Syracuse University Press, $4) "as a sociological study, should prove useful to any person working or about to work in a foreign country."

OPD'S BOOKSHELF

Hot Ashes

Designed to attract wide readership, FALLOUT* uses layman's language to describe the nature of fallout from nuclear explosions and the hazards arising out of it. Ten scientists have joined efforts to write the book.

Weighing and estimating the contamination of our food by fallout from past bomb tests, the authors forecast how high such levels may go in the future and depict what excessive levels would mean in terms of disease, shortening of the life span and genetic effects on future generations.

The publishers of the book describe it as a landmark of clear thinking on a subject which has been vastly confused in the public mind by political propaganda, passionate opinions and wildly contradictory statements. A foreword has been written by Adlai Stevenson, who is prominently featured on the cover jacket for added readership appeal.

As for the value of the book, some guidance may be found in the list of authors: John M. Fowler, assistant professor of physics, Washington University; Lester Machta, chief, Special Projects Section, United States Weather Bureau; Robert J. List, meterologist, United State Weather Bureau; W. O. Caster, assistant professor of physiological chemistry, University of Minnesota Medical School; Walter R. Guild, assistant professor of biophysics, Yale University; James F. Crow, professor of genetics, University of Wisconsin School of Medicine; Gould A. Andrews, associate chairman of the medical division, Oak Ridge Institute of Nuclear Studies; Jack Schubert, senior chemist, Argonne National Laboratory; Chet Holifield, Representative in the United States Congress from California, chairman of a subcommittee on military operations and a special subcommittee on radiation; Arthur H. Rosenfeld, assistant professor of physics, department of physics and the radiation laboratory, University of California; Ralph E. Lapp, physicist and author, former assistant director of Argonne National Laboratory and head of the Nuclear Physics Branch of the Office of Naval Research.

* FALLOUT. Edited by John M. Fowler. Basic Books, Inc., New York. $5.50.

Washington Talks It Over

Chemical Firms Which Make Hazardous Household Products Can Consider Themselves Honored: All Label Law Orders Will Come Straight From the Office of FDA's High Commissioner.

By Ralph L. Cherry
Washington Editor

Manufacturers and packagers of household chemical products, such as those falling under the new hazardous articles labeling control law, are due for top-drawer supervision from the Food & Drug Administration when the agency gets its enforcement program under way.

From all indications, the enforcement plans for the new law are in pretty much of a fluid state. Only one thing is known for certain. For the time being, and until matters get shaken down, all the administrative work, orders and directives will flow from the office of Food & Drug Commissioner George P. Larrick.

Later on, as the industry gets to know the law and its requirements better and as fewer and fewer policy problems are raised, a new section or unit will take over to handle the day-to-day questions as they may arise.

This is very similar to the way the new food additives law was handled. It still is under the direct supervision of the "front" office, but less and less of the detailed work is being done by the commissioners and more and more of the daily contacts are made by industry with the assistants under Commissioner Larrick.

It isn't expected that there will be any crackdowns on industry when the effective date of the new labeling law arrives next February, but some of the more troublesome areas will be on notice to put their labels in order as quickly as possible.

Commissioner Larrick at present is contacting the various poison control centers throughout the country to find out which products or class of products are of greatest concern so that these areas can be brought under control first.

Commissioner Larrick sees the job largely as one of education. There are many manufacturers of products that come under the law who doubtless know little more than that there is a new law on the statute books which may or may not affect their labeling.

A lot of these manufacturers will be reached through the various trade associations and will become familiar with the requirements of the law through their associations. Many more, however, do not belong to any association. It is this group Mr. Larrick will be wanting to contact before the law becomes effective.

CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, August 26 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms., any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml., or redist., 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs.13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs.15.25 - —
tanks, dlvd. ..... 100 lbs.10.00 - —
USP, cbys., dlvd ..... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.33 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd ... lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., dlvd ..... lb. .36½- .37
tanks, dlvd. ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb. dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns., dms ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., l.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., 5,000-lb. lots, same basis lb. 1.30 - 1.45
dms., smaller lots, same basis lb. 1.35 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse. ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (80 mesh), 250-lb. dms., c.l., pt. of shipt lb. .56¼- —
USP, 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb. higher.)
Freight equald, shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .36 - —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd. lb. .42½- —
dms., l.c.l., l.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, dms., t.l., f.o.b. shipping point lb. .41½- —
tanks, same basis ..... lb. .39 - —
tech., polymerization, dms., t.l., f.o.b. shipping point lb. .42½- —
tanks, same basis ..... lb. .40 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.65 - 2.75
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis ... lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd. ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies. lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld. lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ..... lb. .32½- —
dms., l.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. ... lb. .17½- —
dms., l.c.l., dlvd. ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
approx.	approximately	exp.	expressed	phos.	phosphate
artif.	artificial	Ext.	external	photo.	photographic
ASTM	American Society for Testing Materials	F.	fahrenheit	pkgs.	packages
		ferment.	fermentation	powd.	powdered
Atl.	Atlantic	f.f.a.	free fatty acid	precip.	precipitated
Be.	Baume	f.f.c.	free from chlorine	prod.	producer
bbls.	barrels	fib.	fiber	pt.	point
bgs.	bags	f.o.b.	free on board	pulv.	pulverized
bls.	bales	f.p.a.	free of prussic acid	purif.	purified
bots.	bottles	frt.	freight	redist.	redistilled
b.p.	boiling point	gal.	gallon	refd.	refined
b.p.l.	bone phosphate of lime	gran.	granular	refy.	refinery
		grd.	ground	reg.	regular,
b.r.	boiling range	i.&a.	iron and aluminum	resub.	resublimed
bxs.	boxes			ret.	returnable
C.	centigrade	i.b.p.	initial boiling point	SD	specially denatured
cbys.	carboys	imp.	imported		
CD	completely denatured	incl.	included	s.d.	single distilled
		indust.	industrial	S E.	southeast
c.i.f.	cost, insurance, freight	kgs.	kegs	sec.	secondary
		l-	laevo	secs.	seconds
cks.	casks	lacq.	lacquer	s.g.	specific gravity
c.l.	carlots	lb.	pound	shipt.	shipment
cns.	cans	l.c.l.	less carlots	soln.	solution
coml.	commercial	l.t.l.	less truckload	s.u.	standard unit
conc.	concentrated	liq.	liquid	syn.	synthetic
CP	chemically pure	mfrs.	manufacturers	tanks.	railroad tankcars
cps.	centipoises	m-	meta	tech.	technical
cryst.	crystalline	m.a.p.	mixed aniline point	tert-	tertiary
cs.	cases			t.l.	truckloads
ctns.	cartons	min.	minimum	t.w.	tankwagons
cyls.	cylinders	m.p.	melting point	USP	U. S. Pharmacopoeia
d-	dextro	N-	nitrogen		
dbl.	double	n-	normal	vis.	viscosity
denat.	denatured	nat.	natural	VM&P	varnish makers & painters
dest-dist.	destructively—distilled	neut.	neutral		
		NF	National Formulary	W.	west
dl-	dextro-laevo	NNR	New and Nonofficial Remedies	whse.	warehouse
dist.	distilled			w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. .30 - .38
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .80 - —
Aloin, USP, bbls., dms., kgs. ... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works. 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs. 5.05 - —
Powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works ..... 100 lbs. 5.30 - —
Powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05¼- —
bgs., l.c.l., works ..... lb. .05½- .08¼
Aluminum acetate, basic soln., 24%, bbls., l.c.l. works. lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l., works 100 lbs.21.00 - —
dms., l.c.l., works ..... 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works .... lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1093
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works. lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher.
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0365- —
bgs., 20,000-40,000 lb. lots, same basis lb. .039 - —
bgs., 2,000-20,000 lb. lots, same basis lb. .049 - —
bulk, c.l., same basis ..... lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb. ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms. lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms. lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 250 lbs. or more.
Aluminum resinate, precip., 3.4% Al_2 dms. lb. .40¼- —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ..... ton.40.00 - —
lump, bgs., c.l., same basis . ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald, 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld. lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd. lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld. lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. . lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted. lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies. ton.84.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies. ton.86.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.87.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald. 100 lbs. 8.25 - —
bgs., l.c.l., same basis . 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works. lb. 1.00 - —
fib dms. 1,000-lb. lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., cl., works . ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works. 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., divd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works, 100 lbs. 6.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - 8.45
USP, gran., 250-lb. dm lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.28 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld lb .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400 lb dms., 15,000-lbs. works, lb. 1.22 - —
400-lb dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.64.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.64.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Diba.ec, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¾
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works, ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., divd lb. .19 - —
dms., l.c.l., divd. lb. .21½- —
tanks, divd. lb. .16½- —
tech., dms., c.l., divd. lb. .17 - —
dms., l.c.l., divd. lb. .18½- —
tanks, divd. lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., divd lb. .19 - —
dms., c.l., divd. lb. .20½- —
tanks, divd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., divd lb. .43½- —
refd., ACS grade, dms., l.c.l., divd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l., frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld. E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms. lb. 1.55 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls lb. .85 - .90
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 1.75 - 3.00
Anise seed, Mexican, bgs lb. .24 - —
Spanish, bgs. lb. .24 - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 80-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, lb. .29 - —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .27 - —
USP, powd., bbls lb. .31 - .34
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
1-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
1-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 7.35 - —
dms., less than 100-kilos kilo.7.75 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.50 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 - —

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prompt delivery

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Asphalt, petroleum, cut-back, tanks, tankwagon, refy.....gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy...ton.21.00 • —
85-300 penetration, tanks, tankwagon, refy...ton.20.00 • —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins.....oz. 5.75 - 7.50
Atropine sulfate USP, bots.....oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. ....lb. .40 • —
bgs., ton lots, same basis.....lb. .41 • —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 • —
less than 1,000,000,000 units. 50,000 units. .70 • —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs .....lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 • —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 • —
Barium carbonate, precip., bgs., c.l., works ton.111.50 • —
bgs., smaller lots, works ton.126.50 • —
Barium chlorate, dms., works lb. .32 • .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 • —
bgs., l.c.l., works .....ton.196.00 • —
NF, cryst., dms., 400-lbs., works.lb. .23 • —
Tech., cryst., bgs., c.l., works. 100 lbs. 7.00 • —
bgs., l.c.l., works .....100 lbs. 8.00 • —
Barium chromate, bgs., frt. equald. lb. .38 • —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 • —
bgs., l.c.l., t.l., frt. equald ton.218.00 • —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 • —
bgs., l.c.l., frt. equald 100 lbs.11.75 • —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 • —
bbls., l.c.l., l.t.l., dlvd.. .... lb. .17 • —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 • —
dms., l.c.l., l.t.l., frt. equald ton.285.00 • —
Barium peroxide, dms., frt. equald. lb .20 • —
Barium stearate, ctns., c.l., frt. alld. lb. .41 • —
ctns., l.c.l, same basis .....lb. .42 • .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½- —
Barium sulfide, dms., c.l., works. ton.100.00 • —
dms., l.c.l., works .....ton.110.00 • —
Barytes, southern, off-color, bgs., mines ton.30.00 • —
95-75%, bgs., mines .....ton.30.00 • —
white, water-gru.. paper bgs., c.l., St. Louis ton.60.00 -60.25
paper bgs., ex whse., New York ton 84.85 • —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 • —
cbys, l.c.l., works, E..... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. .....lb. 2.55 • —
NF, West Indian, 50-55%, cns. dms lb. 2.50 • —
Bayberry wax, bgs.....lb. .65 • .70
Beeswax, crude, African bgs.....lb. .50 • .52
Brazilian, bgs.....lb. .55 • .56
Central American, bgs .....lb. .53 • —
Chilean, bgs. .....lb. .56 • —
Refd., USP, bleached white, bricks, 100-lb. ctns lb. .69 • .71
white, slabs, 100-lb. ctns lb. .68 • .70
yellow, bricks, 100-lb. ctns lb. .59 • .61
yellow, slabs, 100-lb. ctns lb. .58 • .60
Belladonna leaf, bls. .....lb. .24 • .26
Belladonna root, bls. .....lb. .28 • .35
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 • —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 • —
bgs., 1-ton lots, ex whse ton.99.00 • —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 • —
bgs., 1-ton lots, ex whse ton.97.16 • —
Benzal chloride, cbys., works lb. .44 • —
Benzaldehyde, NF, dms. .....lb. .80 - 1.05
Tech., dms., c.l., t.l. .....lb. .47 • —
dms., l.c.l. .....lb. .48 • —
Benzene, pure or nitration, tanks, works:
Bethlehem, Pa .....gal. .34 • —
Birmingham district ...gal. .34 • —
Chicago district .....gal. .34 • —
Cleveland district ....gal. .34 • —
Geneva, Utah .....gal. .34 • —
Houston, Tex. .....gal. .34 • .40
Johnstown, Pa .....gal. .34 • —
Benzene, pure or nitration, tanks, works:
Lackawanna, N. Y. ..gal. .34 • —
Lone Star, Tex .....gal. .34 • —
Lorain, Ohio .....gal. .34 • —
Middletown, Ohio .....gal. .34 • —
Mennequa, Colo. .....gal. .34 • —
Philadelphia district ...gal. .34 • —
Pittsburgh district ...gal. .34 • —
Sparrows Point, Md. ..gal. .34 • —
Syracuse, N. Y. .....gla. .34 • —
Terre Haute, Ind .....gal. .34 • —
Youngstown, Ohio ....gal. .34 • —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma unit. .0075 —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd. gamma unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis. lb. 1.19 • —
bbls., l.c.l., same basis .... lb. 1.21 • —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 • —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 • —
AAOT, bbls., dlvd. .....lb. 2.55 • —
Lightfast, bbls., dlvd. .....lb. 3.40 • —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 • —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., l.t.l., same basis.....lb. .29 - .41
tanks, same basis .....lb. .21 • —
USP, bbls., dms., ton lots lb. .48 • —
bbls., dms., 1,000-lb lots lb. .50 • —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. .....lb. .32 • —
Benzophenone, dms. .....lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works..lb. 2.25 • —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald.lb. .21 • —
cbys., smaller lots, frt. equald..lb. .23 • —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald..lb. .22 • —
cbys., l.c.l., same basis .....lb. .23 • —
tanktrucks, dlvd. Metropolitan area..lb. .21 • —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works..lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms..lb. .54 • —
Benzyl alcohol, NF, dms. .....lb. .54 • —
Tech., dms., dlvd. .....lb. .47½- .65
Benzyl benzoate, USP, 40-lb. dms lb. .64 • —
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald..lb. .22½- .25½
cbys., dms., l.c.l., same basis lb. .23½- .25½
tanktrucks, dlvd. Metropolitan area..lb. .21 • —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns. .....lb. 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld..lb. 1.25 • —
12-49 dms., same basis.....lb. 1.35 • —
1-11 dms., same basis.....lb. 1.90 • —
Benzyl formate, cns. .....lb. 1.85 - 2.10
Benzyl isoeugenol, cns .....lb. 9.25 • —
Benzyl propionate, bots. .....lb. 1.35 - 1.65
Benzyl salicylate, bots .....lb. 1.50 - 1.85
Benzylidine acetone, bots. .....lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns .....lb. 56.50 • —
Berberine hydrochloride, bots ...lb. 56.50 • —
Bergamot oil, nat., NF, Italian, cns. .....lb. 11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots .....gram.10.00 • —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns .....lb. 1.50 - 1.90
Rectified, cns. .....lb. 1.75 - 2.00
Bismuth chloride, jars .....lb. 5.11 • —
Bismuth hydroxide, dms .....lb. 4.60 - 4.65
Bismuth metal bxs., ton lots ...lb. 2.25 • —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 • —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 • —
Bismuth subcarbonate, USP, 150-lb. dm lb. 3.70 • —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 4.43 • —
Bismuth subiodide, fib dms lb. 5.37 • —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 3.15 • —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.25 • —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 • —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 • —
Bisphenol-A bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 • —
bgs., l.c.l., same basis .....lb. .31 • —
Blackberry root bark, ols .....lb. .50 • .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 • —
bgs., l.c.l., works .....ton.170.00 • —
bgs., l.c.l., New York whse ton.200.00 • —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 • —
Bloodroot, bls. .....lb. .75 • .80

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms..lb. 2.10 • —
Peruvian, dms. .....lb. 1.70 • —
BON acid maroons, pure, bbls lb. 1.75 • —
Resinated, bbls. lb. 1.50 • —
Bone black, dms., c.l., frt. alld..lb. .1750- .2225
l.c.l., works .....lb. .1950- .2425

Pacific coast bone black prices 3¼c. per lb. higher.

Bonemeal, steamed works, E ton.80.00 • —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.92.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 • —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton.83.00 • —
Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works. ton.50.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 • —
bgs., smaller lots, same basis. 100 lbs. 6.57 - 8.57
bulk, c.l., works .....ton.43.50 • —
pentahydrate, 99½%, bgs., c.l., works ton.64.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 • —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works .....ton.58.00 • —
USP, powd., bgs., c.l., works. ton.54.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 • —
bgs., smaller lots, same basis. 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 • —
bgs., l.c.l., same basis .....lb. .26 • —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 • —
bgs., smaller lots, same basis. 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works. ton.163.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.11.05 • —
bgs., smaller lots, same basis. 100 lbs.12.30 -14.30
Boric acid, tech., cryst., 99.9%, dms., c.l., works.....ton.188.50 • —
dms., ton lots, ex whse., New York or Chicago. 100 lbs.12.30 • —
bgs., smaller lots, same basis..100 lbs.13.05 • —
gran., 99.9%, bgs., c.l., works. ton.112.00 • —
bgs., ton lots, ex whse, New York or Chicago..100 lbs. 8.47 • —
bgs., smaller lots, same basis. ton.174.25 • —
dms., c.l., works .....ton.137.00 • —
dms., ton lots, ex whse, New York or Chicago..100 lbs. 9.72 • —
dms., smaller lots, same basis..100 lbs.10.47 • —
bulk, c.l., works .....ton.106.00 • —
powd., bgs., ton lots, ex whse., New York or Chicago. 100 lbs. 8.85 • —
bgs., smaller lots, same basis..100 lbs.10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs.11.45 • —
USP boric acid $25 per ton higher in bags.
Borneol, cns. .....lb. 2.75 • —
Boron trichloride, CP, 1,800-lb. cyls., works..lb. 1.25 • —
100-lb. cyls., works .....lb. 1.70 • —
Boron trifluoride, gas, cyls., t.l., works..lb. .70 • —
cyls., l.t.l., works .....lb. .70 • —
Brimstone (see Sulfur).
Broenner's acid, bbls .....lb. 1.53 • —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies..lb. .32 • —
cs., l.c.l., same basis .....lb. .34 • .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 • —
ret. dms., l.c.l., same basis..lb. .31 • .34
tanks, same basis .....lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 • —
dms., l.c.l., same basis .....lb. .50 • —
tanks, same basis .....lb. .47 • —
Bromoform, pharmaceutical grade, 100-lb. cbys..lb. 1.80 - 1.90
Bromstyrol, bots. .....lb. 5.35 - 5.70
Brucine, cns .....oz. Nominal.
Brucine sulfate, NF, cns. ..... 1.45 - 1.75
Buchu leaves, bbls. .....lb. .70 - .75

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy..lb. .21 • —
cyls., l.c.l., refy. .....lb. .22 • —
tanks, dlvd. .....lb. .14½- —
Butene-1, tanks, works .....lb. .0625- —
Butene-2, tanks, works .....lb. .0570- —
n-Butyl acetate, ferment. dms., c.l., frt. alld..lb. .17 • —
dms., l.c.l., same basis .....lb. .18½- —
tanks, same basis .....lb. .14½- —
Syn., dms., c.l., dlvd. E. lb. .17 • —
dms., l.c.l., same basis .....lb. .18½- —
tanks, same basis .....lb. .14½- —
sec-Butyl acetate, syn., dms., c.l., dlvd. E. lb. .14¾- —
dms., l.c.l., same basis .....lb. .16¼- —
tanks, same basis .....lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .42½- —
dms., l.t.l., same basis .....lb. .43½- —
tanks, same basis .....lb. .40 • —

Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

n-Butyl alcohol, ferment, dms., c.l., frt. alld..lb. .18 • —
dms., l.c.l., frt. alld.....lb. .19½- —
tanks, frt. alld. .....lb. .15½- —
n-Butyl alcohol, syn., dms., c.l., dlvd..lb. .18 • —
dms., l.c.l., frt. alld .....lb. .19½- —
tanks, dlvd. .....lb. .15½- —
Sec-synthetic, dms., c.l., dlvd..lb. .15 • —
dms., l.c.l., dlvd. .....lb. .16½- —
tanks, dlvd. .....lb. .12½- —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E..lb. .16 • —
dms., l.c.l., same basis .....lb. .17½- —
tanks, same basis .....lb. .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works .lb. .37½- —
dms., l.c.l., works .....lb. .38¼- —
n-Butyl ether, dms., c.l., works..lb. .35¼- —
dms., l.c.l., works .....lb. .36 • —
tanks, works .....lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld. E. Rockies..lb. .42½- —
dms., l.c.l., same basis .....lb. .43½- —
tanks, same basis .....lb. .40 • —
Butyl laurate, dms., works .....lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works..lb. .55 • —
dms., l.c.l., works .....lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works..lb. .32 • —
Butyl phenylacetate, dms. .....lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld., E. of Mississippi..lb. .27¼- —
dms., l.c.l., same basis .....lb. .28¼- —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works..lb. .47 • —
dms., l.c.l., same basis .....lb. .47½- —
tc., t.t., same basis .....lb. .45 • —
Butylated hydroxyanisole, food grade, dms., dlvd. ....lb. 4.75 • —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd..lb. .20½- —
dms., l.c.l., l.t.l., f.o.b. works lb. .22 • —
tanks, dlvd. .....lb. .18 • —
p-tert-Butylphenol, bgs., c.l., dlvd., lb. .27½- —
bgs., l.c.l., works .....lb. .28½- —
Butyraldehyde, dms., c.l., dlvd..lb. .22 • —
dms., l.c.l., dlvd. .....lb. .23½- —
tanks, dlvd. .....lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald..lb. .34 • —
dms., l.c.l., same basis .....lb. .34½- —
tanks, same basis .....lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 • —
dms., l.c.l., same basis.....lb. .43 • —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies..lb. 5.55 • —
Light shade, bbls., same basis lb. 4.65 • —
medium shade, bbls., same basis. lb. 5.30 • —
Medium light shade, bbls., same basis lb. 4.90 • —
Orange-red shade, bbls., same basis lb. 4.30 • —
Yellow, all shades, bbls., frt. alld. E. of Rockies..lb. 2.85 • —
Cadmium iodide, 25-lb. fib. dms..lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd.....lb. 1.30 • —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies..lb. 1.65 • —
Cadmium-mercury lithopone red, dark shade, bbls., same basis..lb. 1.95 • —
Red, light shade, bbls., same basis. lb. 1.72 • —
Red, medium shade, bbls., same basis..lb. 1.87 • —
Red, medium light shade, bbls., same basis..lb. 1.80 • —
Red, maroon shade, bbls., same basis..lb. 2.03 • —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies..lb. 2.76 • —
Orange, bbls., same basis .....lb. 1.58 • —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis..lb. 1.72 • —
Red, dark shade, bbls., same basis. lb. 2.56 • —
Red, light shade, bbls., same basis. lb. 1.88 • —
Red, medium shade, bbls., same basis lb. 2.00 • —
Red, medium-light shade, bbls., same basis lb. 2.23 • —
Calmium-selenide lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies..lb. 1.19 • —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 • —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more ...lb. 2.10 • —
Caffeine, USP, nat., cryst., hydrous, dms., 100-lb. lots or more. lb. 1.96 • —
USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 • —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 • —
Cajuput oil, native, cns. .....lb. 1.75 - 2.00
Redist., USP, cns. .....lb. 1.90 - 2.10
Calamine, USP, dms. .....lb. .34 • —
Calamus oil, bots. .....lb.12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 • —
1-10 kilo lots .....gram. .55 • —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 • —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 • .09¼
bgs., l.c.l., same basis .....lb. .10 • .10¼
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 • —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton.149.00 • —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 • —
Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works. ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 • —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
precip., dense, bgs., c.l., works. ton.30.00 -38.50
bgs., l.c.l., works .....ton.45.00 -53.50
medium, bgs., c.l., works ton.38.00 • —
bgs., l.c.l., works .....ton.48.00 -53.00
Calcium Carbonate, surface treated, bgs., c.l., works..ton.42.00 -44.00
bgs., l.c.l., works .....ton.57.00 -59.00
ultrafine, bgs., c.l., works.ton.117.50 -167.50
bgs., l.c.l., works .....ton.137.50 -187.50
Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald. ton.39.30 • —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton.32.00 • —
Liquor, 40%, tanks, frt. equald. ton.12.50 • —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.37.00 • —
Purif., gran., dms. .....lb. .27 • —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald ton.29.50 • —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
USP, gran., dms. .....lb. .32 • —
Calcium chromate, bgs., dlvd lb. .37 • —
Calcium cyanide, dms., c.l., dlvd. E. of Rockies..lb. .20 • —
dms., l.c.l., same basis .....lb. .24 • .55
Calcium cyclamate, 100-lb. dms lb. 1.95 • —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½- —
USP, powd., 100-lb. dm., ton .lb. .66½- —
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs.23.85 -25.60
100-lb. dms., same basis dm.33.30 -36.55
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 • —
Calcium iodide, jars .....lb. 4.52 • —
Calcium lactate, NF, dms., f.o.b. works lb. .43 • .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 • —
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .30 • —
Calcium pantothenate, USP, jars, 1 kilo or more. kilo.35.00 • —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms. .lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald. 100 lbs.16.00 • —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.86.00 • —
bgs., c.l., t.l., f.o.b. Texas City works ton.80.50 • —
bgs., l.c.l., frt. equald ton.96.00 • —
Dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton.97.65 • —
bgs., l.c.l., frt. equald ton.107.65 • —

Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.

Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 • —
bgs., smaller lots, same basis. 100 lbs. 7.95 • —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 • —
bgs., l.c.l., frt. equald. 100 lbs.10.00 • —
Calcium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .34½- —

Prices W. of Rockies 3c. per lb. more.

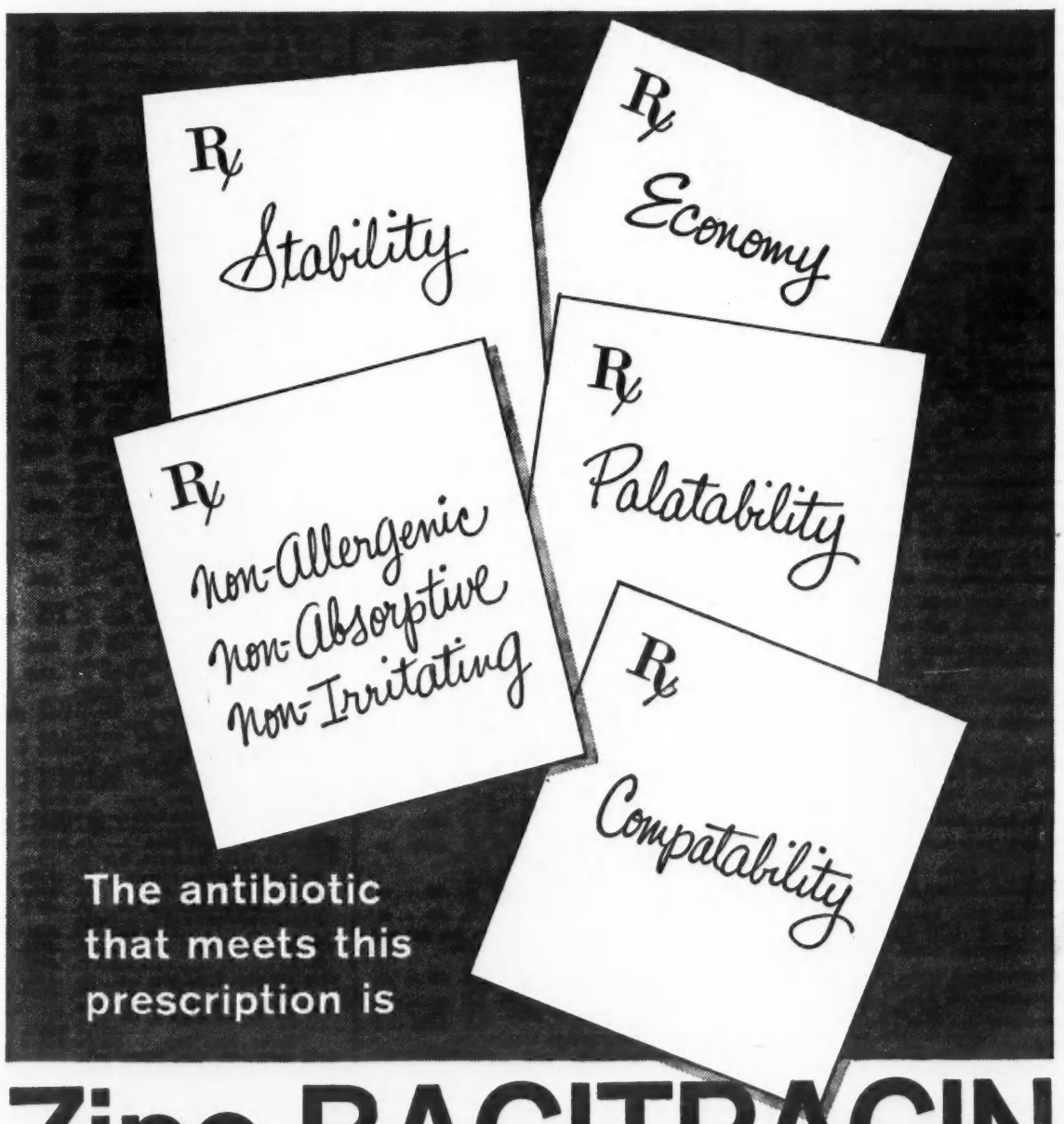
Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N. Y. .lb. .39 • —
Calcium resinate, precip., dms., ton lots, frt. alld., works lb. .40¼- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 • —
bgs., l.c.l., works.....lb. .06½- —

Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Calcium sulfate (see Gypsum).
Camomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.07 - —
Camphene, 46° m.p., dms. incl. c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16¼- —
tanks, same basis ..... lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs. lb. 3.03 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .80 - .83
tablets, 1-oz. cs. ..... lb. .85 - .90
Nat., USP, gran., bbls., 2,000-lb. lots lb. .59 - —
Syn., tech., 1 bbl. or more ... lb. .48 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots ..... lb. .61 - —
tablets, ctns., 1,000-lb. lots. lb. .85 - —
ctns., 500-lb. lots ..... lb. .86 - —
ctns., smaller lots ..... lb. .87 - —
Camphor oil, sassafrassy, dms. ... lb. .35 - .55
White, dms. ..... lb. .26 - .30
Canaga oil, native, cns. ..... lb. 5.00 - 6.50
Rectified, cns. ..... lb. 7.25 -10.00
Candelilla wax, crude, bgs. ..... lb. .55 - .58
Refd., pure, bgs. ..... lb. .60 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. ..... lb. 1.00 - —
powd., bgs. ..... lb. 1.15 - —
Russian, bgs. ..... lb. 2.00 - 2.15
powd., bgs. ..... lb. 2.15 - 2.30
Caprylic acid, dms. ..... lb. .32¼- .34¼
tanks ..... lb. .29¾- —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., l.t.l., same basis lb. .57 - —
tanks, same basis ..... lb. .49 - —
Caproyl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis ..... lb. .19½- —
tanks, frt. equald. ..... lb. .16½- —
Sec., 92-99%, dms., c.l., f.o.b. works lb. .22 - —
dms., l.c.l., f.o.b. works .... lb. .23 - —
tanks, f.o.b. works ..... lb. .19½- —
Caprylic acid, dms. ..... lb .32¼- .34¼
tanks ..... lb. .29¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms. ..... lb. 3.15 - 3.40
Caraway seed, Danish, bgs. ..... lb. .16 - —
Dutch, bgs. ..... lb. .21 - —
Polish, bgs. ..... lb. .17¼- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works ..... lb. .08½- —
bgs., l.c.l., works ..... lb. .16¼- —
Furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. ..... lb. .13½- —
Carbon black, high abrasion, bulk, c.l., works lb. .07¼- —
bgs., c.l., works ..... lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns., l.c.l., whse. ..... lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs., ctns., l.c.l., whse. ... lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton.60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E ton.55.00 - —
Solid, bulk, wholesale, works ton.85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. ..... lb. .0520- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. ..... lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¼- —
tanks, frt. alld ..... lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works .... lb. 4.10 - 4.75
Cardamom oil, NF, bots. ..... lb.39.00 -42.00
Cardamom seed, bleached "A" lb. 3.50 - —
Bleached "B" ..... lb. 3.25 - —
Decorticated Alleppey, cs. .... lb. 2.30 - —
Guatemala, cs. ..... lb. 3.05 - —
Green, Alleppey, bgs. ..... lb. 2.15 - —
Ceylon, bgs. ..... lb. 2.25 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. .... lb.16.80 - —
bulk, smaller lots, dlvd. .... lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .73 - .75
North Country, No. 2, crude, bgs., ton lots lb. .82 - .84
refd., pure, ton lots ..... lb. .91 - .92
North Country, No. 3, Ceara, ton lots lb. .73 - .74
Ceara, refd., pure, bgs., ton lots lb. .81 - .82
North Country, No. 3, Parnahyba, ton lots lb. .74 - .75
Parnahyba, refd., pure, bgs., ton lots lb. .82 - .83
No. 1, Ceara, yellow, bgs., ton lots. lb. 1.00 - 1.02
Parnahyba, yellow, bgs., ton lots lb. 1.02 - 1.03
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram, .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
Carotene, in vegetable oil, sol., kilo.240.00 - —
solid suspension, 400,000 A units per gram, cns kilo.57.60 - —
Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo.72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns.

Carvol, bots. ..... lb. 3.00 - 3.40
Cascara sagrada bark, bulk ..... lb. .32 - —
Casein, dom., edible, acid precip., 20 mesh., bgs., 10,000-lb. lots or more, works .... lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works .. lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .20¼- .20¼
Australian, bgs., c.l., same basis .. lb. .22¼- .22½
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J. lb. .24 - —
dms., ton lots, same basis .... lb. .25 - —
t.w., same basis ..... lb. .22½- —
Cassella acid, dms., frt. alld., 100% basis .. lb. 1.44 - 1.75
Cassia oil, redist., USP, cns. ..... lb. 7.50 - 9.00
Cassia, Padang, "A," bls. ..... lb. .30 - —
"B," bls. ..... lb. .29 - —
"C," bls. ..... lb. .28 - —
Korintje "A," bls. ..... lb. .34 - —
"B," bls. ..... lb. .30 - —
"C," bls. ..... lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. ..... lb. .2650- —
Castor oil, dom., dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. ..... lb. .2850- —
tanks ..... lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. ..... lb. .2660- —
tanks ..... lb. .2360- —
hydrogenated, bgs., c.l. ..... lb. .2450- —
bgs., ton lots ..... lb. .2850- —
bgs., l.c.l., dlvd. ..... lb. .3050- —

Castor oil, No. 1, dms., c.l. .... lb. .2150- —
dms., l.c.l. ..... lb. .2300- —
tanks ..... lb. .2000- —
No. 3, tech., dms., c.l. ..... lb. .2125- —
dms., c.l., ... lb. .2225- —
tanks ..... lb. .1925- —
Refd., deod., dms., c.l. ..... lb. .2650- —
dms., l.c.l. ..... lb. .2750- —
tanks ..... lb. .2450- —
USP, dms., c.l. ..... lb. .2350- —
dms., l.c.l. ..... lb. .2450- —
tanks ..... lb. .2150- —
Imported, No. 1, Braz., tanks .. lb. .18¾- .19
Sulfonated, 50%, dms., works .. lb. .15 - .15½
75%, dms., works ..... lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
Split, dms. ..... lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton.35.00 - —
Castoreum nat., cns. ..... lb. 5.25 - —
Syn., cns. ..... lb. 9.00 - —
Catechol, CP, eryst., fib., dms., works .. lb. 2.17½- —
Resub., dms., works ..... lb. 4.29½- —
Catnip leaves, Southern, bls. .... lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 3.25 - 3.50
Cedarwood oil, cns., dms. ..... lb. .70 - —
Celery seed, French, bgs. ..... lb. .37 - —
Indian, bgs. ..... lb. .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd. E .. lb. .36 - .51

Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E .. lb. .545 - .559
17% butyryl content, bgs., dlvd. E .. lb. .593 - .603
38% butyryl content, bgs., dlvd. E .. lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E .. lb. .545 - .555
50% butyryl content, bgs., dlvd. E .. lb. .585 - .593
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more works, frt. alld .. lb. .57 - —
bgs., smaller lots, same basis .. lb. .59 - —
Cerium hydrate, 74% CeO, fib. dms., 100-lb. lots or more .. lb. 1.40 - —
77% CeO, fib. dms., 100-lb. lots or more .. lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb. 1.85 - 1.90
bgs., smaller lots, dlvd. ..... lb. 2.15 - —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E .. lb. .41½- —
fib. cns., l.c.l., same basis .. lb. .43½- —
tanks, same basis ..... lb. .39 - —
Extra, cns., c.l., t.l., dlvd. E .. lb. .48½- —
fib. cns., l.c.l., same basis .. lb. .50½- —
tanks, same basis ..... lb. .46 - —



Zinc BACITRACIN

When Commercial Solvents Corporation manufactured in bulk the first bacitracin, chemists recognized its value in pharmaceutical compounds.

Regular bacitracin is non-allergenic, non-absorptive, and non-irritating. And now *zinc* bacitracin combines these qualities with special benefits for topical applications.

Zinc bacitracin is stable, even at the high temperatures needed for the manufacture of many pharmaceuticals. It is unusually economical, because its storage and thermal stability eliminate the need for utilizing a high percentage of excess antibiotic. It is compatible with other antibiotics, and is inherently less bitter tasting than regular bacitracin.

For regular and *zinc* bacitracin, micronized to your specifications, sterile or non-sterile—and immediate delivery—call Commercial Solvents.

PHARMACEUTICAL CHEMICALS SECTION — INDUSTRIAL CHEMICALS DEPARTMENT

COMMERCIAL SOLVENTS CORPORATION

260 MADISON AVENUE, NEW YORK 16, N. Y. • LEXINGTON 2-6420

Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, bls lb. .90 - 1.00
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb. 350.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton 80.00 - —
5-lb paper bgs., c.l., same basis ton 106.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton 90.00 - —
40-lb paper bgs c.l., same basis ton 86.00 - —
Chenopodium oil, NF, cns lb. 4.25 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb .23 - —
dms., l.c.l., works lb .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb .21 - —
Chloral hydrate, USP, jars, 1,000-lb lots lb. 1.00 - —
jars, 500-lb lots lb. 1.03 - —
jars, 100-lb lots or less lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb .70 - —
Chlorinated paraffin, 40%, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., 10 cars or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l. works lb. .61 - —
125 cps., ctns., c.l., works lb. .70 - —
300 cps., ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 7.25
Chloroacetic acid, mono, flake, 99%, purif. dms., c.l lb. .23½- .25¼
dms. l.c.l. lb. .24½- —
tech., flake 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., divd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., divd. lb. .27 - —
dms., l.c.l., divd. lb. .30 - —
tanks, minimum 4,000 gals. divd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, divd. E., 100% basis lb. .81 - —
Powd., divd. E., 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd., divd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt. alld lb. 1.07 - —
cyls., 100 lbs., same basis lb. 1.08 - —
cyls., 50 lbs., same basis lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms.½c. per lb. higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., t.l., same basis lb. .38 - —
Choline bitartrate, fib. dms., frt. adjusted kilo 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls., divd. E. of Rockies. lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
medium blue content, 41-45%, bbls., same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
Reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W. of Rockies.

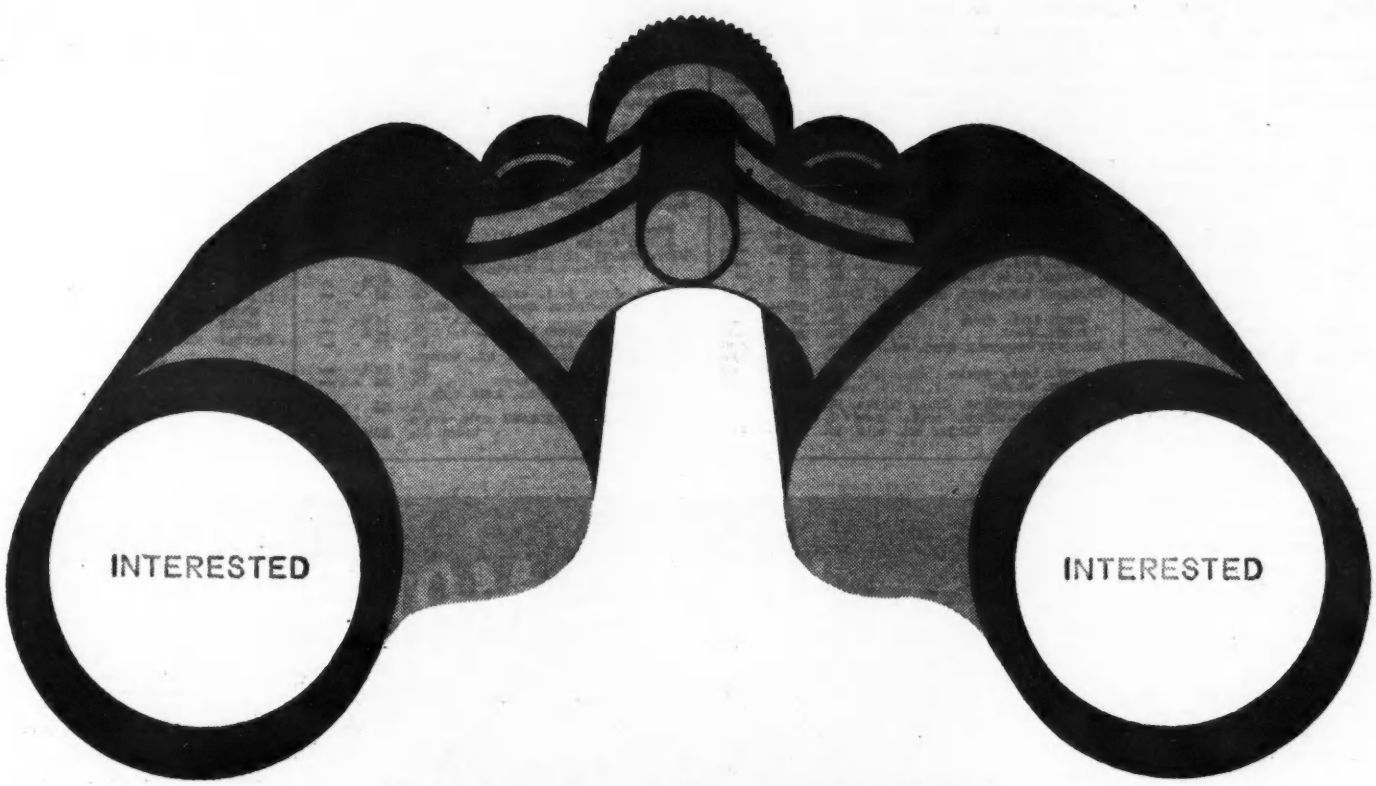
Chrome orange, CP, bbls., divd. E. of Rockies lb. .35 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP, bbls., divd. E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., divd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb .25 - —
NF, yellow, broken, bgs lb .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots. lb. 1.60 - 1.75
Cinnamic aldehyde, dms lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .53 - —
Ceylon, No. "0000," bgs. lb. .73 - —
Cinnamon bark oil, bots lb. 36.00 - 70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP, (Cassia), cns., dms lb. 8.50 - 13.50
Citral, CP, bots. lb. 3.60 - 4.00
Extra, bots. lb. 3.60 - 5.00
Syn., dms. lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms lb. 1.00 - —
Java-type, dms lb. .92 - —
Citronellal, bots., dms lb. 1.60 - 2.10
Citronellol, bots., dms lb. 1.90 - 2.50
Citronellol, synthetic, dms lb. 1.70 - —
Civet, artif., bots lb. 13.75 - 15.00
Nat., bots. oz 8.50 - 15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 17.50 - 21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 - 11.00
imp., airfloated, bgs., c.l., Atl. port net-ton 42.00 - 45.75
lump, bulk, Atl. port net-ton 29.50 - 35.75
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 10.00 - 12.00
Georgia, bgs., l.c.l., works. ton. 15.50 - —
dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works. ton. 13.50 - 14.50
bgs., l.c.l., ex-whse ton. 35.00 - 36.00
imp., white, lump, bulk, c.l. ex-dock, Philadelphia, Portland, Me long-ton 20.00 - 35.00
white, powd., bgs., c.l., ex dock net-ton. 50.00 - —
bgs., l.c.l., ex whse net-ton. 60.00 - 70.00
Cleaners naphtha, petroleum, 105 F Flash, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140° F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt alld lb. 1.05 - —
1.6, tech., solid, dms., frt. alld lb 77 - —
1.7, tech., dms., frt alld lb 2.20 - —
Cloves, Madagascar, bgs. lb. .32½- —
Zanzibar, bgs. lb. .36½- —
Clove bud oil, USP, dms lb. 2.70 3.60
Clove leaf oil, crude, dms. lb. 1.25 - —
CMC, crude, 96.4% low or medium vis., bgs. or fib dms., 25,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low, or medium vis., bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse gal. .39 - —
tanks, works gal. .20½- —
Coaltar pitch, aluminum, bulk, works. ton 44.00 - —
Carbon and indust., bulk, works ton 44.00 - —
Core, bulk, works ton 40.50 - —
Fiber, bulk, works ton 46.00 - —
Roofing, 140-155° F., Federal Specification RP-381 Type 1. lb. .28 - —
Cobalt acetate, 23.7% Co., dms., dlvd lb. 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 - —
Cobalt naphthenate, liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls., dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R. lb. 1.15 - —
70-71% Co., kgs., same basis lb. 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.

Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .33½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz. 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots, f.o.b. works oz. 13.75 - —
Cocillana bark, bls lb. .18 - .20
Cocoa butter, bgs lb. .59 - .64
Coconut oil, crude, tanks, New York lb. .14¾- —
tanks, Pac. coast lb. .12½- —
Refd., deodorized, dms. lb. .22 - .22½
Coconut oil acids, dist., dms. lb. .26½- .29
tanks lb. .24 - —
Double dist. (stripped), dms lb. .27½- .30
tanks lb. .25 - —
Cod oil, dms., spot lb. .08¾- .08½
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms gal. 1.40 - 1.70
Cohosh root, black, bls lb 20 - .25
Blue, bls. lb 20 - .25
Colchicine, USP, bots oz. 29.00 - —
Colchicum root, bls lb. .35 - .45
Colchicum seed, bgs lb. .75 - .80
Collodion, USP, dms lb. .32½- —
USP flexible, dms lb. .34 - —
Colocynth pulp, bls. lb. .75 - —
Colombo root, bls lb. .16 - .18
Condurango bark, bls lb. .18 - .20
Congo copal gum, No. 1, bgs lb. .26 - .27
No. 2, bgs. lb. .23 - .25
No 3, bgs. lb. .18 - .20
Copaiba balsam, cns., dms lb. .60 - 65
Copaiba oil, cns lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3635- —
bgs., l.c.l., works lb. .3785- —
Copper chloride cupric, anhyd., dms., works lb. .45½- .46
cryst., dihydrate, dms., works. lb. .31 - .31½
cryst., dried, dms., works lb. .39¼- .39¾
Copper chloride, cuprous, dms., works lb. .4135- .4435
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .659 - .65
Copper gluconate, dms lb. 3.20 - —
Copper hydrate, dry, dms., c.l., frt. E of Miss lb. .53½- —
dms., l.c.l., same basis lb. .54 - —
Copper metal, electrolytic, dlvd. Valley basis lb. .33 - .36
Copper naphthenate, liq., 8% Cu, dms, frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb lots, works lb. .49¼- —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots lb. .50½- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .48½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .41½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs. 13.00 - —
bgs., l.c.l., works 100 lbs. 13.25 - 15.75
Monohydrated, 35%, dms., c.l., works 100 lbs. 24.00 - —
dms., l.c.l., works 100 lbs. 24.75 - —
Tribasic, distributors, bgs., c.l., works 100 lbs. 29.60 - —
bgs., l.c.l., works 100 lbs. 31.10 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton. 175.00 - —
Pac. ports, c.i.f. ton. 170.00 - —
Coriander oil, USP, bots. lb. 8.75 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Rumanian, bgs. lb. .10½- —
Yugoslavian bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .12 - —
Foots (soapstock) acid 95%, tanks, New York lb. .05¼- —
Refd., salad, dms lb. .1773- .18
tanks lb. .1573- —
Corn oil acids, dist., dms. lb. .15¾- .18¼
tanks lb. .1648- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs. 7.45 - —
Corn syrup, 42° Be., f.o.b. plant 100 lbs. 5.41 - —
non-ret. dms., c.l., same basis. 100 lbs. 7.52 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.75
Costus oil, bots oz. 6.00 - —
Cottonseed meal, 41%, bgs. Memphis ton. 54.00 - —
Cottonseed oil, crude, tanks, South, East lb. .10 Nom.
tanks, Valley lb. .09⅞ Nom.
tanks, Texas, Lubbock lb. .09¾ Nom.
tanks, Texas, Waco lb. .09¾- —
Foots (soapstock), acid, 95%, tanks, Texas, Waco lb. .03½- —
Refd., salad, dms. lb. .15 - .15½
tanks lb. .13 - —
Cottonseed oil acids, dist., dms lb. .15¾- .18¼
tanks lb. .13½- —
Coumarin, NF, cryst., dms lb. 3.30 - 3.40
Cramp bark, NF, bls lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt, adjusted gal. .24 - —
Crude, soln. 80%, tanks, works, gal. .226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.

Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, cbys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works, lb. .0561- —
dms., incl., l.c.l., works lb. .0634- —
dms., incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works, lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C., dms., c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
o-Cresol, 30.5°C. m.p. and over, ret. -Cresol, 29°-29.9° C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.00
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b works, frt. equald, to competitive points, 50 dms. or more. gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.10
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs., l.t.l., works lb. .22 - —
Cubeb berries, NF, bgs lb. 1.00 - —
Powd., cs. lb. 1.15 - —
Cubeb oil, cns lb. 12.00 - 16.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .22 - —
Moroccan, bgs. lb. .36 - —
Turkish, bgs lb. .27 - —
Cumin seed oil, bots., cns lb. 15.50 - 17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton. 57.00 - —
Fertilizer, pulv., 21% N, bgs., works unit-ton. 2.85 - —
Cyanamide, fertilizer, indust. grade, bgs, c.l., works ton. 75.00 - —
bgs., l.c.l., works ton. 96.00 - —
Indust. grade, 6-16 mesh, dms., c.l., works ton. 120.00 - —
dms., l.c.l., works ton. 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal. 1.02 - —
dms., l.c.l., same basis gal. 1.10 - —
dms., c.l., dlvd. W of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
98%, tech., 40-dm. lots or more, f.o.b. works gal. .56 - —
5-39 dms., same basis gal. .60 - —
tanks, same basis gal. .36 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E lb. .28½- —
dms., l.c.l., works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l., works lb. .34½- —
tanks, works lb. .31 - —
lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cypress oil, bots. lb. 5.30 - —

D

2,4-D, tech., bgs., dms., c.l., works, frt, equald lb. .40 - —
tanks, dlvd. E. lb. .41 - —
bgs., dms., l.c.l., same basis lb. .45 - —
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis lb. .48 - —
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - —
tanks, works lb. .42 - —
Dammar gum, Batavia, A E, cs lb. No stock
East India, Batu, bold, bgs lb. .15½ -
nubs and chips, bgs. lb. .(-
black, bold, bgs lb. .15½ -
nubs and chips, bgs. lb. .12¼ -
unscraped, bgs. lb. .13 -
pale, chips, bgs. lb. .15 -
pale, nubs, bgs. lb. .20¼ -
Siam, cs. lb. .31½ -
Singapore, No. 1, bgs. lb. .34 -
No 2, bgs. lb. .29 -
No. 3, bgs. lb. No stock
dust, bgs. lb. .18 -
Dandelion root, bls lb. .35 -
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 -
fib. dms., l.c.l., works lb. .46 -



INTERESTED

A deep interest in the problems of pharmaceutical manufacturers has helped the Cyanamid Fine Chemicals Department develop a number of new products and ideas for clients. This interest, of course, is backed by the research and production facilities of the company. Whatever your problem—in formulation, new product development, production capacity—"Fine Chemicals" can offer a critical study of the situation with technical assistance of the highest calibre.

Vitamins, sulfonamides, antibiotics, intrinsic factor concentrate and other bulk pharmaceuticals. Complete custom synthesis service.

CYANAMID

AMERICAN CYANAMID COMPANY
FINE CHEMICALS DEPARTMENT
30 Rockefeller Plaza, New York 20, N.Y.

DDT—Diethyl Toluamide

DDT, flake or lump, bgs., c.l., dlvd. lb. .23 • —
bgs., smaller lots, same basis. lb. .25 • —
fib. dms., c.l., same basis. lb. .24 • —
fib. dms., smaller lots, same basis. lb. .26 • —

Powdered DDT 1c. per pound higher.

DDVP (see Dimethyl dichlorovinyl phosphate).

l-Decanol, tech., dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E. lb. .45½- —

Cyclohexylamine, dms., c.l., works.

Decyl alcohol, mixed isomers, dms., c.l., dlvd. lb. .23½- —
dms., l.c.l., dlvd. lb. .25 • —
tanks, dlvd. lb. .21 • —

Perfume grade, bots. lb. 1.00 - 2.00

Decyl alcohol, normal (see l-Decanol)

Deertongue leaves, bls. lb. .55 - .60

Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss. ton. 57.07 • —
18% P, paper bgs., c.l., works. ton. 66.25 -71.80
19% P, paper bgs., c.l., t.l., works, Houston, Tex. ton. 74.35 • —

Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common (15-17% free fatty acid), 400-lb. dms. lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb. dms. lb. 13 • —

Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, dlvd., same basis gal. .53½- —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .72 • —
dms., l.c.l., same basis gal. .77 • .83
tanks, same basis gal. .56 • —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 • —
dms., l.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —

Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —

Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —

For anhyd. alcohol on above formulas prices are 7c. per gal. higher.

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, dms. lb. 15.00 -17.00

dl-Desoxyephedrine hydrochloride, dms. lb. 6.50 • —

Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 • —
paper bgs., l.c.l. 100 lbs. 9.53 • —
canary dark, paper bgs., c.l. 100 lbs. 9.22 • —
paper bgs., l.c.l. 100 lbs. 9.37 • —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.12 • —
paper bgs., l.c.l. 100 lbs. 9.27 • —
white, paper bgs., c.l. 100 lbs. 8.96 • —
paper bgs., l.c.l. 100 lbs. 9.11 • —

Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 • —
bgs., l.c.l. 100 lbs. 8.80 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms. 100 lbs. 14.70 • —
100-lb. dms. 100 lbs. 15.20 • —
Hydrated, coml., bgs., c.l., ex whse. 100 lbs. 7.45 • —
bgs., c.l., ex whse. 100 lbs. 7.60 • —
USP, dms. lb. .19¾- —

Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. lb. .17 • —
tanks, dlvd. lb. .13 • —
Tech., dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —

Diacetyl, flavor grade, bots. lb. 4.30 - 4.55

Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —

Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —

Diallylamine, dms., c.l., dlvd. lb. .98½- —
dms., l.c.l., dlvd. lb. 1.00 • —
tanks, dlvd. lb. .96 • —

o-Dianisidine, dry, tech., fib. dms. lb. 2.00 • —

Dibenzyl sebacate, dms., c.l., works. lb. .93 • —
dms., l.c.l., same basis lb. .94 • —
tanks, same basis lb. .91 • —

Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —

2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. lb. .65 • —
l.t.l., dms., same basis lb. .68 • —
Food grade, c.l., t.l., dms., dlvd. lb. .65 • —
dms., l.t.l., same basis lb. .68 • 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 • —
dms., l.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —

Dibutyl fumarate, dms., c.l., t.l., dlvd. E. lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E. lb. .33 • —
tanks, dlvd. E. lb. .29 • —

Dibutyl maleate, dms., c.l., t.l., dlvd. E. lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E. lb. .33 • —
tanks, dlvd. E. lb. .29 • —

Dibutyl phthalate, dms., c.l., dlvd. E. lb. .31 • —
dms., l.c.l., same basis lb. .32½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —

Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —

Dibutyl tartrate, dms., works, frt. alld. lb. .65½- —

Dibutylamine, dms., c.l., dlvd. lb. .55½- —
dms., l.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —

Dicapryl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 • —
tanks, dlvd. lb. .25 • —

Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 • —

2,5-Dichloroaniline, dms., works lb. .83 • —

3,4-Dichloroaniline, tech., solid, tanks, frt. alld. lb. .73 • —

o-Dichlorobenzene, dms., c.l., frt. alld. E. lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 • —

p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E. lb. .12 • —
dms., 2,000 lbs. or more same basis lb. .14½- —

1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 • —
tanks, works lb. .32 • —

Dichlorodiphenyltrichloroethane (see DDT).

2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E. lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .17 • —
tanks, same basis lb. .13 • —

Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald. lb. .65 • —
dms., l.c.l., same basis lb. .75 • —

Dichloropentanes, dist., dms., c.l., works lb. .05 • —
dms., l.c.l., works lb. .06 • —
tanks, works lb. .03 • —

Dichlorophenoxyacetic acid (see 2,4-D).

Dicyclohexylamine, dms., c.l., works. lb. .54 • —
dms., l.c.l., works lb. .55 • —
tanks, works lb. .52 • —

Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 • —

Dicyclopentadiene, dms., c.l., f.o.b. works lb. .14½- —
dms., l.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 • —

Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., l.c.l., same basis lb. .30 • —
tankcars, tanktrucks, 2,000 gals. lb. .26 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —

Dieldrin, dms., c.l., dlvd. lb. 1.85 • —
dms., l.c.l. dlvd. lb. 1.90 • —

Diethanolamine, dms., c.l., dlvd. E. lb. .37 • —
dms., l.c.l., same basis lb. .38½- —
tanks, same basis lb. .34½- —

Diethanolamine lauryl sulfate, dms., c.l., frt. alld. lb. .27½- —
dms., l.t.l., frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —

Diethyl barbituric acid (see Barbital).

Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 • —

Diethyl ethanolamines, dms., c.l., dlvd. lb. .69½- —
dms., l.c.l., dlvd. lb. .71 • —
tanks, dlvd. lb. .67 • —

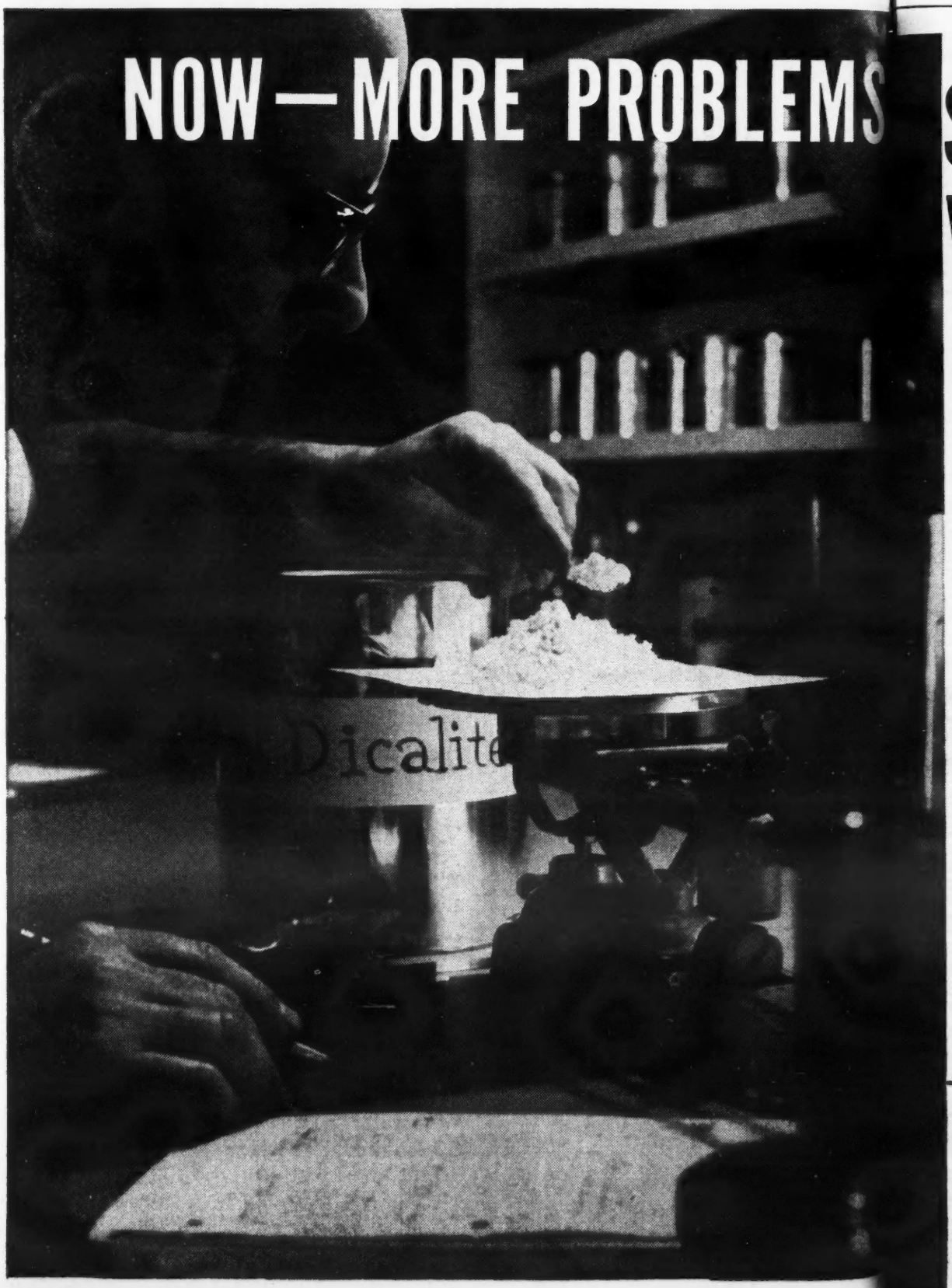
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —

Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 • —

Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —

Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms., l.c.l., same basis lb. .59 • —

Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works. lb. 2.30 • —
5-44 dm. lots, works lb. 2.35 • —
1-4 dm. lots, works lb. 2.40 • —



N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld. lb. .23 - —
Diethylamine, dms., e.l., dlvd. E. lb. .52 - —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., e.l., frt. alld. lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd. E. lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works. lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E. lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. lb. .22½- —
dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd. E. lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. lb. .21 - —
dms., l.c.l., dlvd. lb. .22½- —
tanks, dlvd. E. lb. .18½- —
Diethylenetriamine, dms., e.l., dlvd. E. lb. .44 - —
dms., l.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E. lb. .41½- —
Diethylstilbesterol, USP, bots., 10-kilo lots kilo. 100.00 -147.50
bots, 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms. lb. 1.25 - —
Digitoxin, USP, bots. gram. 4.20 - —
Diglycol laurate, dms. lb. .32¾- .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycolic acid, bgs., c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin sulfate, bulk. gram. .035 - .036
1,2-Dihydroxy anthraquinone, dms., works lb. 3.43 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms. lb. 2.53 - —
Tech., dms., 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 - —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E. lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd. lb. .23½- —
dms., l.c.l., same basis lb. .30 - —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .23½- —
tankcars, tanktrucks, 2,000 gals., dlvd. lb. .26 - —
Di-iso-octyl sebacate, dms., c.l., works. lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms. lb. 3.75 - 4.25
Dimethyl anthranilate, cns. lb. 4.15 - —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd. lb. 3.50 - —
Dimethyl ethanolamines, anhyd., dms., c.l. dlvd. lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis. lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 - 2.20
Dimethyl phthalate, dms., c.l., works lb. .28½- —
dms., l.c.l., works lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .18 - —
dms., l.c.l., works lb. .18½- —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .26 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld. lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld. lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies. lb. 1.56 - —
Dinitroaniline orange toner prices 1c higher W. of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E. lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .23½- —
dms., l.c.l., frt. alld lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., dlvd. E lb. .33 - —
tanks, dlvd. E. lb. .29 - —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 - —
bgs., l.c.l., l.t.l., dlvd. E. lb. .41 - —
Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., l.c.l., works lb. .62 - —
dms., l.c.l., ex whse. gal. .78 - —
tankscars, works gal. .41 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 - —
Diphenyl, bgs., c.l., t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide, perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., l.c.l., same basis lb. .33 - —
Refd., fused, tanks, same basis lb. .28 - —
Refd., diphenylamine in dms., ½c. per lb. higher.
Diphenylguanadine, bgs., dms., ton lots, frt. alld. lb. .49 - —
bgs., smaller lots, frt. alld. lb. .50 - —
Diphenylhydantoin-sodium, USP, dms. lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., frt. alld. lb. .18½- —
tanks, frt. alld. lb. .14¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E. lb. .20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld. lb. .69 - —
dms., smaller lots, frt. alld. lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld. lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald. lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., l.c.l., works, 100% basis. lb. 1.05 - —
tanks, same basis lb. .90 - —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E. lb. .75 - —
dms., l.c.l., l.t.l., same basis lb. .76 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald. lb. .134 - —
dms., l.c.l., same basis lb. .144 - —
tanks, same basis lb. .11 - —
Dodecylphenol, c.l., frt. alld. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 31.30 -35.90
Red, FD&C, No. 1 lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD&C, No. 1 lb. 15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10

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NEW MATERIALS INCREASE RANGE OF APPLICATIONS

Dicalite has added new products to its family of filler materials, as well as new quality control measures. Now, diatomite, perlite and carbon-based materials are available to meet industry's widest range of filler applications.

Because of their unique particle structure and their physical and chemical properties, Dicalite filler materials are used in a tremendous variety of ways—in paint, paper, rubber, plastics, resins, cements, fertilizers, insecticides, horticultural mediums, as catalyst carriers, absorbents, etc.

They offer tremendous surface area and porosity, great bulk in relation to weight, high absorptiveness, and structural reinforcement in many uses. All are chemically and physically stable in practically all applications. Diatomite is used in many high temperature insulations; perlite is especially effective in cryogenic applications.

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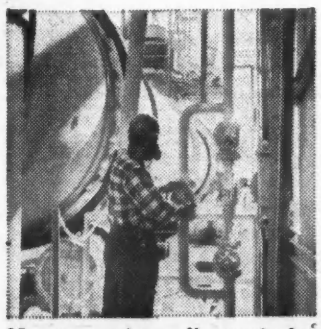
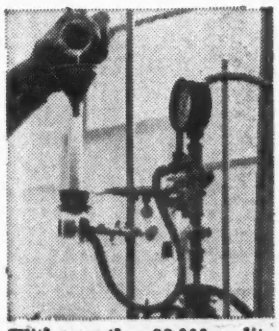
Careful strata selection provides the best crude for each product's final requirements.



New processing refinements, including special calcining methods, control product characteristics with an accuracy never before possible in any plant.



With more than 22,000 quality control tests every month, the Dicalite plant laboratories hold every product grade to rigid specifications.

New automatically-controlled packing and pressure-palletizing is the final step in efficient modern operation.

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Dyes—Ethyl Morphine Hydrochloride

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

Black, D&C, No. 1	lb.	10.50	-10.95
Brown, D&C, No. 1	lb.	15.65	-16.10
Green, D&C, No. 5	lb.	15.65	-16.10
No. 6	lb.	15.65	-16.10
No. 7	lb.	14.35	-14.80
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb.	3.80	- 4.25
Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	23.60	-24.00
No. 19	lb.	15.00	-15.45
No. 21	lb.	3.90	- 4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No. 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No. 11	lb.	13.05	-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65	-16.10
Green, Ext., D&C, No. 1	lb.	15.65	-16.10
Red, Ext., D&C, No. 1	lb.	13.05	-13.50
Yellow, Ext, D&C, No. 1	lb.	10.50	-10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

11110	Brilliant scarlet BN	lb.	1.79	—
13390	Fast blue SR	lb.	1.43	—
14025	Yellow 2G	lb.	1.26	—
14030	Orange R, extra, conc.	lb.	1.64	—
14645	Chrome black T	lb.	.77	—
14720	Rubine XX, conc.	lb.	1.59	—
15510	Orange Y, extra conc.	lb.	.83	—
15575	Orange RR	lb.	.99	—
15620	Fast Red A, conc.	lb.	1.61	—
15705	Chrome blue black R, conc.	lb.	1.12	—
16150	Scarlet 2RL	lb.	1.22	—
16255	Brilliant scarlet 3RN, conc.	lb.	1.26	—
16230	Fast light, orange 2G	lb.	1.39	—
17590	Brown PG	lb.	3.00	—
18050	Phloxine 2G	lb.	1.05	—
18055	Fuchsine 6B	lb.	1.55	—
18965	Fast yellow 2G	lb.	2.32	—
19140	Yellow XX	lb.	2.48	—
19555	Yellow NN, conc.	lb.	3.67	—
20170	Brown Y	lb.	1.33	—
20470	Blue black, extra, conc.	lb.	1.44	—
21010	Brown, RX, conc.	lb.	1.35	—
22240	Scarlet B	lb.	2.81	—
22310	Red FC	lb.	1.57	—
22311	Brown MCW	lb.	1.47	—
22610	Blue 2B, extra conc.	lb.	1.53	—
23500	Red, 4BX, conc.	lb.	1.80	—
24410	Sky blue FF, extra, conc.	lb.	1.95	—
24895	Brilliant yellow, conc.	lb.	3.27	—

Dyes, coaltar for general use in cloth dyeing numbers are those of the Color Index scale or prototype), contract dlvd. No.

26360	Navy blue 3R, conc.	lb.	1.84	—
26695	Black F, conc.	lb.	2.30	—
26900	Milling Red 3R, conc.	lb.	2.24	—
27075	Neutral black 2B, conc.	lb.	2.75	—
27720	Gray L	lb.	2.18	—
29185	Fast scarlet 4BNC	lb.	2.23	—
30015	Diazo black VJ conc.	lb.	2.48	—
30045	Yellow brown K, extra	lb.	1.26	—
30235	Black EB, 200%	lb.	1.33	—
30295	Green BY, conc.	lb.	1.07	—
35660	Brown B	lb.	2.89	—
37965	Naphthol SWF	lb.	1.85	—
40000	Yellow 2G	lb.	1.44	—
41000	Yellow OX	lb.	2.45	—
42000	Green V, crystals	lb.	2.73	—
42040	Brilliant green G crystals	lb.	3.62	—
42090	Blue EG	lb.	1.85	—
42100	Milling green 6B, conc.	lb.	4.78	—
42640	Violet 4BXN	lb.	2.43	—
43830	Brilliant blue, BBG	lb.	2.44	—
44045	Blue B, extra conc.	lb.	3.61	—
45170	Red BX	lb.	4.76	—
50415	Nigrosine SSJ	lb.	1.03	—
52015	Blue GXX	lb.	2.33	—
58005	Alizarin red SC	lb.	3.64	—
59700	Golden orange GFD, single paste	lb.	2.70	—
59710	Flaming orange 6RD double powder	lb.	4.90	—
59800	Dark blue BO, single paste.	lb.	2.28	—
59825	Jade green NC supra, double paste	lb.	1.50	—
61570	Alizarin green CG, extra	lb.	3.81	—
63010	Alizarin blue SAPG	lb.	3.90	—
63615	Alizarin blue black B	lb.	3.26	—
69825	Blue BLFD double paste	lb.	2.82	—
70800	Brown BR single paste	lb.	2.03	—

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd.

No.				
12140	Oil scarlet BL	lb.	1.87	—
12055	Oil orange 7078 V	lb.	1.38	—
26120	Oil red N 1700	lb.	1.94	—
42535B	Methyl violet base	lb.	1.88	—
44045B	Victoria blue base	lb.	4.06	—
50415B	Oil black 8603	lb.	.80	—
61565	Alizarin cyanine green base.	lb.	6.13	—
	Spirit black RB	lb.	3.89	—
	Spirit brown GN	lb.	5.30	—
	Spirit orange R conc.	lb.	5.87	—
	Spirit red B conc	lb.	6.41	—
Pr. 517	Spirit yellow 2R conc.	lb.	4.62	—
Pr. 554	Spirit blue THN	lb.	5.06	—

E

Echinacea root, bls.	lb.	1.25	—
Elm bark, grinding, bls.	lb.	.30	- .33
Powd., bbls., bxs.	lb.	.60	—
Select, bundles	lb.	.75	—
Emetine hydrochloride, USP. bots.	oz.	48.40	—
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd	lb.	2.70	—
Eosin red toner, bbls., works	lb.	1.95	—
Ephedrine syn., USP, anhyd., bots. 100-oz lots	oz.	.98	- 1.00
hydrous, bots., 100-oz. lots,	oz.	.92	—
Ephedrine hydrochloride, NF, dms., 100-oz. f.o.b. works	oz.	.72	—
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works	oz.	.73	—
USP, powd., dms., 100-oz., same basis	oz.	.73	—
Epichlorohydrin, dms., c.l., dlvd	lb.	.29½	—
dms., l.c.l., dlvd.	lb.	.31	—
tanks, dlvd.	lb.	.27	—
l-Epinephrine base, syn., USP, bots., 100 gram lots	gram	.58	—
Epsom salt (see Magnesium sulfate).			
Erigeron oil, cns.	lb.	11.00	—
Ergot, NF, dms., tin-lined	lb.	1.00	- 1.25
Eserine salicylate, bots.	oz.	44.00	—
Eserine sulfate, bots.	oz.	86.00	—
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va	lb.	.18½	—
Wood-rosin type, dms., c.l., same basis	lb.	.18½	—
Ether (see specific product).			
Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd.	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
95-98%, dms., c.l., dlvd.	lb.	.15¼	—
dms., l.c.l., dlvd.	lb.	.16¾	—
tanks, dlvd.	lb.	.12¾	—
Ethyl acetate, nat., ferment, 99%, dms., c.l., dlvd	lb.	.15½	—
dms., l.c.l., dlvd.	lb.	.17	—
tanks, dlvd.	lb.	.13	—
syn., 85-88%, dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd.	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
Ethyl acetate, syn., 95-98%, dms., c.l., dlvd	lb.	.15¼	—
dms., l.c.l., dlvd	lb.	.16¾	—
tanks, dlvd	lb.	.12¾	—
99%, dms., c.l., dlvd.	lb.	.15½	—
dms., l.c.l., dlvd.	lb.	.17	—
tanks, dlvd.	lb.	.13	—
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	58½	—
dms., l.c.l., dlvd.	lb.	.60	—
tanks, dlvd	lb.	.56	—
Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.36	—
dms., l.t.l., dlvd.	lb.	.37	—
tanks, dlvd	lb.	.34	—
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E. of Rockies	gal.	20.63	—
dms., l.c.l., same basis	gal.	20.73	-20.84
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., l.c.l., same basis	gal.	.78	- .89
tanks, same basis	gal.	.52	—
Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies	gal.	21.75	—
dms., l.c.l., same basis	gal.	21.85	-21.96
tanks, same basis	gal.	21.59	—
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).			
Ethyl aminobenzoate, USP (see Benzocaine).			
Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20	—
dms., l.c.l., same basis	lb.	.21½	—
tanks, same basis	lb.	17½	—
Ethyl benzoate, bots.	lb.	.75	- 1.00
Ethyl bromide, tech., 96%, dms., c.l., frt. alld. E	lb.	.43	—
dms., l.c.l., frt. alld. E	lb.	.45	—
tanks, frt. alld. E	lb.	.41	—
Ethyl butyl ketone, dms., c.l., t.l., works	lb.	.36	—
dms., l.c.l., t.t.l. works	lb.	.36¾	—
tanks, works	lb.	.34	—
Ethyl butyrate dms., works	lb.	.85	- 1.00
Ethyl carbamate (see Urethane)			
Ethyl cellulose, vis. 4 cps., bgs., 5,000-lb. lots or more, frt. alld. E	lb.	.73	—
bgs., smaller lots, frt. alld. E	lb.	.75	—
Vis 10, 20, 50 100, 150 cps., bgs., 5,000-lb lots or more, frt. alld. E	lb.	.68	—
bgs., smaller lots, frt. alld E.	lb.	.70	—
Ethyl chloride, tech., cyls., works.	lb.	.20	- .22
dms., works	lb.	.18	- .20
tanks, works	lb.	.10	—
Ethyl cinnamate cns.	lb.	3.35	- 3.50
Ethyl ethanolamies, mixed, dms., c.l., dlvd. E	lb.	.43½	—
dms., l.c.l., dlvd. E	lb.	.44½	—
tanks, dlvd. E	lb.	.41½	—
Ethyl ether, absolute, ACS, dms	lb.	.27	—
Anesthesia, USP, dealers, 1-lb. cns	lb.	1.01	—
½-lb. cns	lb.	1.09	—
¼-lb. cns.	lb.	1.21	—
Indust., dms., c.l., dlvd.	lb.	.13½	—
dms., l.c.l., dlvd. E.	lb.	.15	—
tanks, dlvd E.	lb.	.11	—
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E	lb.	.37	—
dms., l.c.l., t.t.l., dlvd. E.	lb.	.38½	—
tanks, dlvd. E.	lb.	.34½	—
2-Ethyl hexoic acid, 1c. higher W. of Rockies.			
2-Ethyl hexyl acrylate, dms., c.l. t.l., straight or mixed, frt. alld. E	lb.	.42½	—
dms., l.t.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.40	—
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.			
2-Ethylhexyl alcohol, dms., c.l., dlvd.	lb.	.23¾	—
dms., l.c.l. dlvd.	lb.	.25¼	—
tanks, dlvd.	lb.	.21¼	—
Ethyl iodide, cbys., works	lb.	3.30	—
Ethyl methacrylate, dms., c.l., frt. equald	lb.	.52	—
dms., l.t.l., frt. equald	lb.	.52½	—
tanks, frt. equald	lb.	.50	—
Ethyl morphine hydrochloride, USP bots	oz.	11.85	—

on the move in chemicals...

Because most chemicals are made from other chemicals, the chemical industry is its own best customer. At Olin Mathieson, for example, sulfuric acid, soda ash, chlorine and caustic soda are finished products. But they are starting points for other chemical manufacturers whose output, in turn, may go into producing still other chemicals.

To help the chemical industry keep pace with our expanding economy and growing population, Olin Mathieson is on the move. Currently we are increasing caustic/chlorine production in important growth areas—providing new facilities for greater production of basic organic chemicals—marketing urea of highest purity.

Change is the challenge, and the future depends on the ability to predict change and prepare for it. As a step in providing for your future, let us review your chemical requirements now. In terms of future—or present—developments, our experience in chemical supply can be useful.

7443B

Olin Mathieson

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Methanol • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sodium Methylate • Sulfur (Processed)
Sulfuric Acid • Urea • Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Ethanolamines • Glycol Ethers • Surfactants • Ethylene Dichloride

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Trisodium Phosphate • Trisodium Phosphate Chlorinated • Sodium Tripolyphosphate • Tetrasodium Pyrophosphate • Sodium Hexametaphosphate
Monosodium Phosphate • Disodium Phosphate • Sodium Acid Pyrophosphate • Tetrapotassium Pyrophosphate • Sulfuric Acid • Hydrofluoric Acid
Sodium Silicofluoride • Sodium Fluoride • Teox® 120 Surfactant

Ethyl oenanthate, dms. lb. 1.05 - 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., dlvd. lb. .44½- —
dms., l.c.l., dlvd. lb. .46 - —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.04 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld. lb. .83 - —
N-Ethyl-o-toluidine, bbls. lb. .83 - —
Ethylamine (see Mono-, Di-, or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —
Ethylbenzene, 99%, dms., c.l., t.l., frt. equald. lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethylene, contract, refy. gate lb. .0475- .0525
Ethylene dibromide dms., c.l., frt. equald lb. .30½- —
dms., l.c.l., frt. equald lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23½- —
tanks, dlvd. E lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E lb. .29¾- —
tanks, dlvd. E lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms lb. .33 - .35
Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —
Ethylene trichloride (see Trichloroethylene).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
lots and over lb. 6.75 - —
200-lb. lots and over lb. 7.00 - —
100-lb. lots and smaller lb. 7.30 - 7.40
Ethylvanillin, 100-lb. fib. dms., 500-lb. lb. .85 - 1.40
Eucalyptol, USP, cns., dms lb. .85 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms lb. .44 - .55
NF, rectified, 80-85%, dms. lb. .53 - .62
Eugenol, tech., dms lb. 1.45 - —
USP, dms. lb. 2.00 - —
Euphorbia herb, bls. lb. .12 - .15

F

F salt, paste, tech. dms., works lb. 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 - —
Feldspar in bags $3 per ton higher.
Fennel oil, sweet, USP, cns. lb. 1.95 - 2.25
Fennel seed, Argentine, bgs. lb. .16 - —
French, light, bgs. lb. .16 - —
Indian, light, bgs. lb. .17½- —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs. lb. .16½- —
Fenugreek seed, Moroccan, bgs. lb. .08 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald, 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate gran., dms lb. .86 - —
Ferric hypophosphite, NF, dms lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs. lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .70 - —
Ferric resinate, 6¾% Fe., dms., ton lots, frt. alld lb. .40¼- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 - —
bgs., l.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., l.c.l., divd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton. 40.00 - —
bulk, c.l., works ton. 27.00 - —
USP, cryst., bbls., dms lb. .09½- .10
Fir balsam, Canada, bbls. gal. 32.00 - 35.00
Oregon, bbls. gal. 3.40 - 4.64
Fir oil, Canada, cns. lb. 1.75 - 2.50
Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms. lb. .1480- .1530
Light-pressed, dms. lb. .1100- .1150
tanks lb. .09½- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 92.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton. 88.00 - —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram .30 - .44
10% feed grade, fib. dms., 3 kilos or more kilo. 30.00 - 44.00

Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd. lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls. lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb. .23½- —
dms., l.c.l., frt. equald lb. .24¼- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms., c.l. works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .11½- —
tanks, dlvd. W lb. .12½- —
Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J. lb. .20½- —
dms., l.c.l., l.t.l., Newark, N. J. lb. .21½- —
dms., c.l., t.l., Memphis, Tenn. lb. .19 - —
dms., l.c.l., l.t.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn. lb. .175 - —
Fusel oil, refd., dms., c.l., dlvd. lb. .18 - —
dms., l.c.l., dlvd. lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF, VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsenium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs. lb. .30 - —
Powd., bbls., bxs. lb. .30 - —
Geraniol, extra, cns., dms. lb. 1.75 - 2.40
Soap grade, dms. lb. .90 - 1.75
Standard, cns., dms. lb. 1.65 - —
Synthetic, dms. lb. 1.30 - —
Geranium oil, Algerian, cns. lb. 23.00 - —
Bourbon, cns. lb. 28.00 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb. 1.90 - 2.70
Synthetic, dms. lb. 1.45 - —
Ginger oil, dist., bots. lb. 11.50 - 14.00
Ginger oleoresin, NF, from African root, bots. lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs. lb. .29 - —
Jamaican, No. 3, bgs. lb. .28 - —
Nigerian, split, bgs. lb. .20 - —
Sierra Leone, bgs. lb. .35½- —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd. lb. .18 - —
95-149, bgs., c.l., dlvd. lb. .19 - —
122-149, bgs., c.l., dlvd. lb. .20½- —
150-177, bgs., c.l., dlvd. lb. .22½- —
178-206, bgs., c.l., dlvd. lb. .25 - —

It's only common sense to look at *all* raw material costs—alcohol costs, for example. Here is where lower price methanol may be able to deliver real savings over the alcohol you're now using.

How much can methanol help to reduce manufacturing and processing costs? Plenty, when you consider that the total market for the big 3 alcohols is in excess of 4 billion lbs. annually. Methanol, the lowest cost of the three, often can offer definite advantages when used in place of isopropanol in automotive chemicals, laminates, pharmaceutical extractions, metal cleaning and petroleum processing . . . and in place of ethanol in petroleum processing, as a dye solvent, and in film manufacture. What's your share of these potential savings? Write for Product Bulletin S-03-6, or check with your Celanese representative or distributor. They can give you money-saving facts about Celanese Methanol, and answer your specific questions.

Celanese Chemical Company, a Division of Celanese Corporation of America, Dept. 656-H 180 Madison Avenue, New York 16. Celanese®

Canadian Affiliate: Canadian Chemical Company Limited, Montreal, Toronto, Vancouver
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Ave., N. Y. 16

Celanese CHEMICALS

Glue—Hydroquinine Monomethyl Ether

Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd..... lb. .30½- —
267-298, bgs., c.l., dlvd..... lb. .32½- —
299-330, bgs., c.l., dlvd..... lb. .34½- —
331-362, bgs., c.l., dlvd..... lb. .36½- —
363-394, bgs., c.l., dlvd..... lb. .38 - —
395-427, bgs., c.l., dlvd..... lb. .40 - —
428-460, bgs., c.l., dlvd..... lb. .42 - —
461-494, bgs., c.l., dlvd..... lb. .44 - —
495-529, bgs., c.l., dlvd..... lb. .46 - —

Hide glue, l.c.l., prices 2c. higher.

l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —

l-Glutamine, bots., 1-9 kilo lots, kilo.150.00 -300.00
Bots., 50-kilo lots..... kilo.100.00 - —
Bots., 500-kilo lots..... kilo. 75.00 - —

Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd lb. .20½- —
nat., crude, soaplye, 80%, tanks, dlvd lb. .18½- —
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .30⅞- —
dms., l.c.l., dlvd. ..... lb. .31⅝- —
tanks, dlvd. ..... lb. .29⅛- —

Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .30 - —
dms., l.c.l., dlvd. ..... lb. .30¾- —
tanks, dlvd. ..... lb. .28¼- —
nat., high gravity, dms., c.l., dlvd lb. .30¾- —
dms., l.c.l., dlvd. ..... lb. .31½- —
tanks, dlvd. ..... lb. .29 - —

Glycerine, dom., syn., dms., c.l., dlvd lb. .31 - —
dms., l.c.l., dlvd. ..... lb. .31¾- —
tanks, dlvd. ..... lb. .29¼- —
Imp., nat., crude, soaplye, 80%, c.i.f. lb. .17½- —

Glycine (see Aminoacetic acid).

Glycerol (see Glycerine).

Glycolic acid (see Hydroxyacetic acid).

Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis..... lb. .42 - —
tanks, same basis..... lb. .39 - —

Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works..... lb. .21¼- —
tanks, works ..... lb. .18 - —

Golden seal root, NF, tested, bls. lb. 3.10 - —

Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.70 - —

Grapefruit oil, dms. ..... lb. 4.50 - —

Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½

Cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½

90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½

95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½

Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 .31

No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31

Grease, white, choice all hog, tanks, dlvd lb. .07¼- .07¾
Yellow, tanks, dlvd. ..... lb. .04⅞- .05
Grease oil, No. 1, dms., c.l. .... lb. .13¾- —
dms., l.c.l. ..... lb. .14¾- .15¾
Extra winter, strained, dms., c.l. lb. .16¼- —
dms., l.c.l. ..... lb. .17¼- .18¼
Prime, burning, dms., c.l. .... lb. .17¾- —
dms., l.c.l. ..... lb. .18¾- .19¾

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. .... lb. .40 - —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., cbys., dms. ..... lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms lb. 3.40 - 3.45
Guaiacwood oil, cns. ..... lb. .65 - .80
Guar gum, food grade, bgs., c.l. lb. .38 - —
bgs., 5,000 lbs or more..... lb. .39 - —
Indust., bgs., c.l. ..... lb. .32 - —
Tech grade, bgs. ..... lb. .30 - .33

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis..... lb. .95 - —

Hansa yellow, 10 G, bbls., dlvd. E. of Rockies lb. 2.45 - —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. ..... lb. .18 - .20
Heliotropin, 100-lb. lots, dms. lb. 2.60 - 3.40
Hellebore root, dom., green, bls. lb. .70 - .75
Helonias root, bls. ..... lb. 1.50 - —
Hemlock oil, cns. ..... lb. 2.55 - 3.00
Henbane leaves, bls. ..... lb. .40 - .45
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas ..... gal. .1625- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b. works lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb. 22.50 - —
bots., 5-lb. lots, works..... lb. 23.00 - —
bots., 1-lb. lots, works..... lb. 23.50 - —
Hexachlorophene, dms., 1,100 lbs. or more lb. 1.84 - —
dms., to 1,100 lbs. ..... lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City lb. .233 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots, same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .49¼
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas ..... gal. .16 - —
l-Hexanol, dms., c.l., works..... lb. .35 - —
dms., l.c.l., works..... lb. .35¾- —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works..... lb. .76 - —
Hexyl salicylate, dms. ..... lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd. ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms., smaller lots, dlvd. .... lb. 14.50 - —
Homatropine hydrobromide, USP, bots. oz. 3.25 - —
Homatropine methylbromide, USP, bots. oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. ..... lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100%, ret. dms., works..... lb. 1.60 - 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30½
tanks, dlvd. zone 1..... lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald.... ton. 30.00 - —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald. ton. 35.00 - —
Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works lb. .15¾- —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis. lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.15 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd 100 lbs. 19.25 - —
55-gal. dms., l.c.l., t.l.l., dlvd. 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
20-gal. dms., l.c.l., t.l.l., dlvd. 100 lbs. 22.50 - —
tanks, works frt. equald. 100 lbs. 13.40 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .36 - .40
50-lb. cyls., l.c.l., works..... lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls., dlvd W. ..... lb. .39 - —
tanks, works ..... lb. .18 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. ..... lb. .211 - —
tanks, dlvd. ..... lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. ..... lb. .82½- —
dms., l.c.l., dlvd. ..... lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd lb. 2.59 - —
dms., l.t.l., dlvd. ..... lb. 2.61 - —

HERE COMES A
$560 SAVING FOR
A CHICAGO LACQUER
MANUFACTURER
He switched from n-butyl acetate to Eastman ISOBUTYL ACETATE and is saving 14¢ per gallon. That's $560 for a 4,000-gallon tank truck.
All over the country, cost-conscious lacquer manufacturers are turning to Eastman Isobutyl Acetate for their medium-boiling solvent requirements. It can be used interchangeably with n-butyl acetate in most lacquer formulations. Its substitution in nitrocellulose lacquers, for example, produces virtually no change in either film properties or handling characteristics.
Eastman Isobutyl Acetate can be substituted for methyl isobutyl ketone, too, at a savings of 5¢ per gallon.
Eastman Isobutyl Acetate can frequently replace combinations of n-butyl acetate with sec-butyl acetate or n-propyl acetate at a lower cost per gallon.
Call your nearest representative and ask him to show you how you can save solvent money by switching to Eastman Isobutyl Acetate.
Eastman
CHEMICAL PRODUCTS, INC.
Subsidiary of Eastman Kodak Company
KINGSPORT, TENNESSEE
SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta, Chicago, Cincinnati, Cleveland, Detroit; Framingham, Massachusetts; Greensboro, North Carolina; Houston, New York City, Philadelphia, St. Louis.
In the Canal Zone: Williams & Cia., Mayer & Compañía; San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago..lb. .11 - —
tanks, Belle, W. Va. .....lb. .073 - —
Hydroxycitronellol, cns. .....lb. 4.85 - 5.75
Hydroxyethyl cellulose, add grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point..lb. .84 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis..lb. .89 - —
fib. dms., 100 to 1,999-lb. lots, same basis..lb. .93 - —
fib dms., smaller lots, same basis..lb. 1.03 - —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots.oz. 7.00 - —
Hyoscyamine sulfate, bots. .....oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works....lb. 1.95 - —
NF, 50%, 10-cbys., same basis..lb. 1.35 - —

I

Ichthammol, NF, dms. .....lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP, bots. .....lb.13.75 -15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd..lb. 4.50 - —
Inositol, 50-lb. lbs., less than 1,000 lb., dlvd..lb. 4.75 - —
10 lb. cns., 10-50 lbs., dlvd. lb. 5.00 - —
5 lb. bots., dlvd.....lb. 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. .....lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works..lb. 4.90 - —
dms., 100-lbs., same basis....lb. 5.05 - —
a-Ionone, cns. .....lb. 4.60 - 5.75
b-Ionone, cns. .....lb. 4.15 - 6.15
Ipecac root, whole, bgs. .....lb. 8.00 - 8.50
Powd., bbls., bxs. .....lb. 9.50 -10.00
Irish moss, bleached, prime, bls..lb. .25 - .27
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls., l.c.l., ton lots, same basis. lb. .58 - —
bbls., smaller lots, same basis.lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E lb. .52 - —
Iron blue, alkali-resisting, dom., reg., bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works..lb. .14¼- —
bgs., l.c.l., works.....lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works..lb. .14¼- —
bgs., l.c.l., works.....lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City..lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works..lb. .06¼- —
bgs., l.c.l., works.....lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock..lb. .05¾ Nom.
bbls., l.c.l., ex dock .....lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works..lb. .06¼- —
Peruvian type, bgs., l.c.l. lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works..lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld E..lb. .27½- —
dms., l.c.l., same basis.....lb. .29 - —
tanks, same basis.....lb. .25 - —
Isoborneol, cns. .....lb. 1.44 - 1.80
Isobornyl acetate, cns. .....lb. .46 - .56
Isobornyl formate, dms. .....lb. 1.20 - —
Isobornyl proprionate, dms. .....lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns..lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies..lb. .15¼- —
dms., l.c.l., same basis.....lb. .16¾- —
tanks, same basis.....lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. .....lb. .17 - —
tanks, dlvd. .....lb. .13 - —
Isobutylene, 99%, tanks, works..gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works..lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd..lb. .27½- —
dms., l.c.l., dlvd. .....lb. .28½- —
Tech., dms., c.l., dlvd. .....lb. .22 - —
dms., l.c.l., dlvd. .....lb. .23 - —
tanks, dlvd. .....lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd..lb. .52 - —
dms., l.c.l., same basis.....lb. .57 - —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., t.t.l., same basis..lb. .36½- —
t.c. t.t., same basis.....lb. .33 - —
Isoeugenol, cns. .....lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo.18.00 - —
Isonicotinic acid, 100-lb. fib. dms., works..lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. .....lb. .25 - —
tanks, dlvd. E. .....lb. .21 - —
Isopentane, com'l. grade, tanks, f.o.b. Tex. refy..gal. .16½- —
Isophorone, dms., c.l., works....lb. .24½- —
dms., l.c.l., works.....lb. .25¼- —
tanks, works .....lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald..lb. .18 - —
dms., l.c.l., same basis.....lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis.....lb. .15½- —
tanks, same basis.....lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd..gal. .58 - —
dms., l.c.l., dlvd. .....gal. .66 - —
tanks, dlvd. .....gal. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd..gal. .60 - —
dms., l.c.l., dlvd. .....gal. .70 - —
tanks, dlvd. .....gal. .44 - —
anhyd., c.l., dlvd. .....gal. .62 - —
dms., l.c.l., dlvd. .....gal. .72 - —
tanks, dlvd. .....gal. .46 - —

Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd..lb. .09¼- —
dms., l.c.l., dlvd. .....lb. .11 - —
tanks, dlvd. .....lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works..lb. 1.00 - —
dms., l.c.l., works.....lb. 1.05 - 1.25
tanks, works .....lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works..lb. .75 - —
450-lb. fib. dms., l.c.l., works..lb. .80 - .90
Isoquinoline, dms., works.....lb. .65 - 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works..lb. .53½- —
bgs., l.c.l., same basis.....lb. .54½- —
Tech., bgs., c.l., same basis..lb. .38½- —
bgs., l.c.l., same basis.....lb. .39½- —

J

J acid, paste, bbls., works, 100% basis..lb. 2.70 - —
Powd., bbls., same basis.....lb. 2.75 - —
Jalap root, NF, bls. .....lb. .60 - —
NF, powd., bbls., bxs. .....lb. .70 - .75
Japan wax, cs. .....lb. .29 - .31
Juniper berries, bgs. .....lb. .16 - .17
Juniper berry oil, NF, bots. ....lb. 2.90 - 3.75
Twice rectified, bots. .....lb. 3.25 - —
Juniper tar oil, NF, dms. .....lb. .42 - .60
Juniper wood oil, tech., cns. ....lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms.....lb. .10 - .12
NF, colloidal, 50-lb. bgs. .....lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls..lb. .45 - .50
No. 2, powd., bbls. .....lb. .43 - .45
No. 3, powd., bbls. .....lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis..lb. 1.00 - —
Kola nuts, bgs. .....lb. .13 - .15

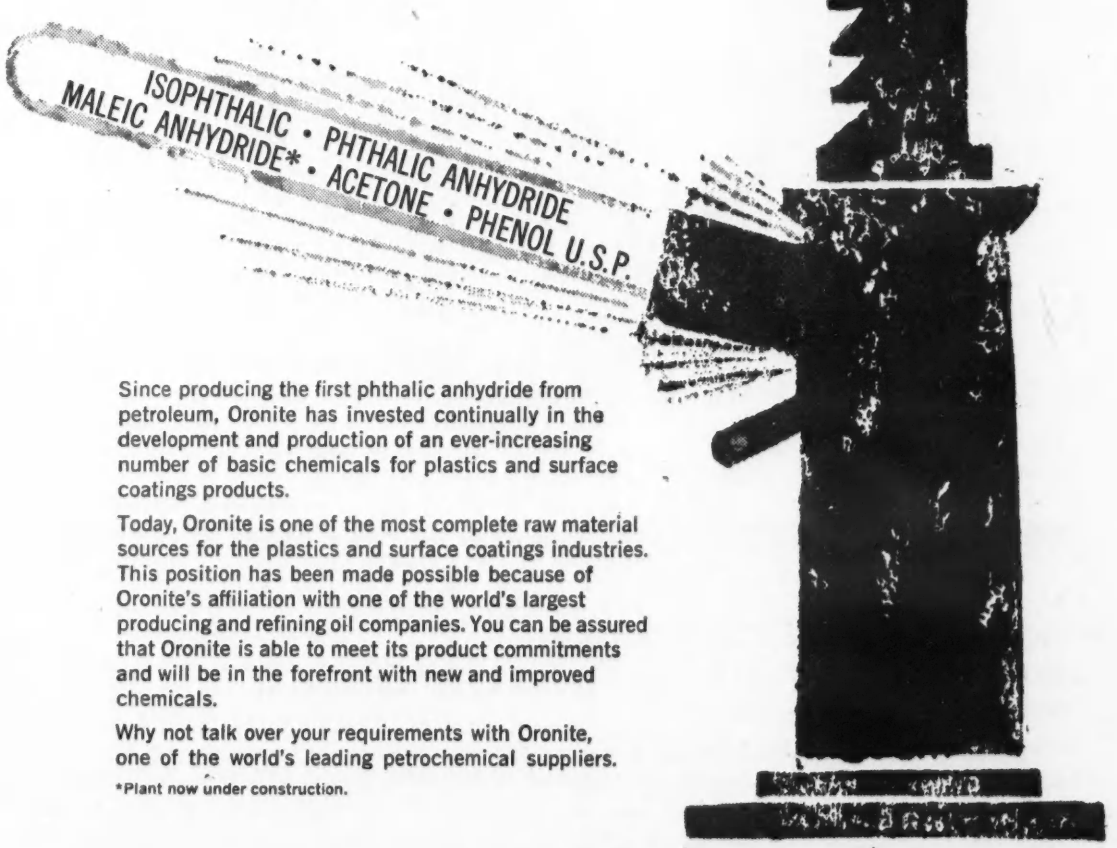
L

L acid, bbls., works.....lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 .....gal. .15125- —
Houston, Texas .....gal. .16 - —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York..gal. .20 - —
Group 3 .....gal. .14125- —
Houston, Texas .....gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald.....lb. .1985- —
bbls., dms., 20 or more, frt. equald..lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald..lb. .3335- —
bbls., dms., 20 or more, frt. equald..lb. .3385- —
Lactic acid, edible, 80%, bbls., dms., 5 to 19, frt. equald..lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works..lb. .2740- —
bbls., 20 or more, works..lb. .2790- —
bbls., 5 to 19, works.....lb. .2840- —
bbls., 1 to 4, works.....lb. .2890- —
80%, bbls., c.l., works.....lb. .4625- —
bbls., 5 to 19, works.....lb. .4725- —
bbls., 1 to 4, works.....lb. .4775- —
Tech., 44%, bbls., c.l., works. 100 lbs.12.45 - —
bbls., l.c.l., works.....100 lbs.12.85 - —
USP, 85%, cbys. .....lb. .83 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald..lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald..lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment, grade, bgs., c.l., works..lb. .08½- —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald..lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald..lb. .22¼- —
200-1,880-lb. lots, frt. equald..lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald..lb. .18½- —
bgs., l.t.l., frt. equald....lb. .19 - .19¾

ORONITE®

Going up UP UP

as a chemical supplier to the PLASTICS and SURFACE COATINGS industries



Since producing the first phthalic anhydride from petroleum, Oronite has invested continually in the development and production of an ever-increasing number of basic chemicals for plastics and surface coatings products.

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*Plant now under construction.

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FOREIGN AFFILIATE • California Chemical International, Inc., San Francisco, Geneva, Panama
6728

Lady's slipper root, bls. ..... lb 3.00 - 3.50
Lamp black, bbls., c.l., works ..... lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .25
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP, hydrous, 400-lb dms., works lb. .20 - —
Lard, cash, dms., Chicago ..... lb. .11225- —
Lard oil (see Grease oil).
Larkspur seed bgs. ..... lb. .55 - —
Laurel leaf oil, dms. cns. ..... lb 9.75 -12.50
Laurentic acid, bbls. ..... lb .70 —
Lauric acid, pure, dms. ..... lb. 35¾- .36¼
tanks ..... lb. .32¾- —
Lauryl alcohol, bots ..... lb 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., l.t.l., works ..... lb. .68 - —
Lavandin oil, 22-24%, dms. ... lb. 1.10 - 1.50
Abrial, dms ..... lb. 1.00 - 1.50
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. ..... lb. .20 - .25
Select., bls. ..... lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester, cns. ..... lb. 5.00 - 7.75
Spike, Spanish, cns. ..... lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. ..... lb. .25½- —
gran., bbls. ..... lb. .26½- —
powd., bbls ..... lb. .26½- —

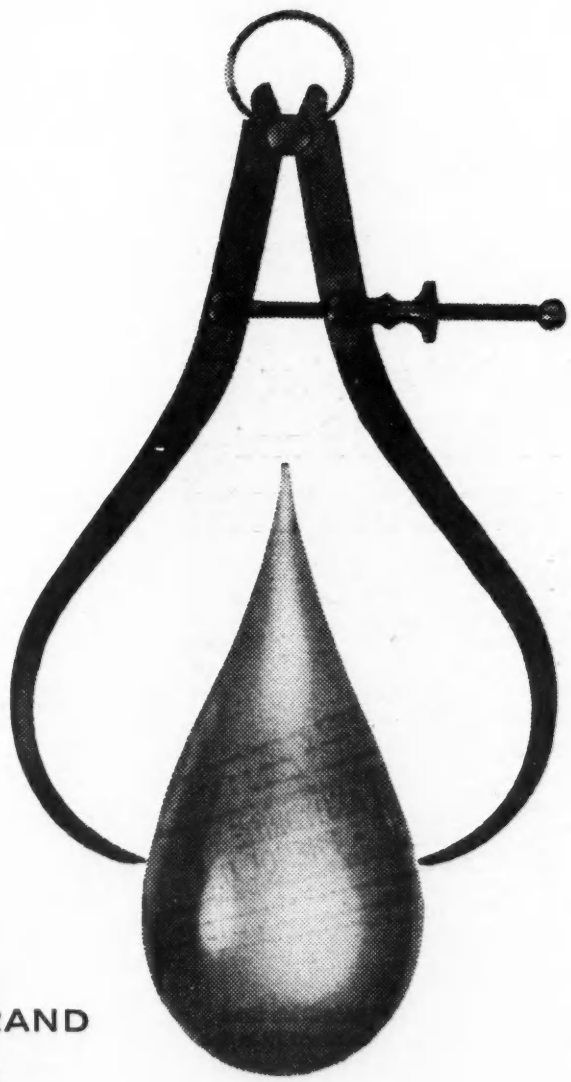
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. ..... lb. .52 - —
Lead iodide, NF, V jars ..... lb. 3.82 - —
Lead linoleate fused, 26% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .12 - —
St. Louis ..... lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis ..... lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd. ..... lb. .24¼- —
Solid, 37% Pb., dms., dlvd. ... lb. .31¾- —
Lead nitrate, bbls. ..... lb. .24¼- .26¾
Lead orthosilicate gel., 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1475- —
bbls., l.c.l., same basis. lb. .1575- —

Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1495- —
bbls., l.c.l., same basis lb. .1595- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1510- —
bbls., l.c.l., same basis lb. .1610- —
Lead resinate precip. 23% Pb, dms., ton lots, dlvd lb. .43¾- —
Lead salicylate, normal dms., works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld. lb. .20 - —
bgs., l.c.l., same basis ..... lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms. ..... lb. .26¾- —
Solid, 30% Pb, dms. ..... lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs., l.c.l., same basis ... lb. .19 - —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis ... lb. .17½- —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis .... lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. package, works lb. 6.45 - —
Lemon oil, USP, Calif., cns., dms. lb. 1.23 - 1.50
Messina, cns. ..... lb. 3.25 - 4.00
Lemongrass oil, cns., dms. ..... lb. 1.95 - 2.20

dl-Leucine, dms., works ..... lb. 12.25 -15.00
Licorice root, gran., bls. ..... lb. .13 - —
Powd., bls. ..... lb. .15 - .16
Whole, bls. ..... lb. .09 - .10
Lignaloe wood oil, Mexican, cns. lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).
Lilac oil ..... lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs., c.l., same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns. ..... lb. 5.75 - —
West Indian, cns ..... lb. 5.75 - —
Expressed, West Indian, cns. ... lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.45 - 4.25
Syn., 98-100%, dms., works .... lb. 2.40 - 2.75
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 2.63 - 4.50
96-98%, dms. ..... lb. 3.25 - —
Syn., 98-100%, dms., works .... lb. 2.75 - —
Lindane, 25% formulation, to distributors, dms., frt. alld. lb. 1.35 - 1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd. lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd. lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs., dlvd lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls. ..... lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, Mills ... ton. 57.50 - —
Extracted, 34% bulk, same basis ton. 53.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1680- —
dms., l.c.l., New York .... lb. .1770- .1820
tanks, f.o.b. Minneapolis .... lb. .1320- —
tanks, New York ..... lb. .1431- —
tankwagon, New York ..... lb. .1481- —
Boiled linseed oil, .006c. per lb higher.
Linseed oil, acid, dist., dms ... lb. .2030- —
Water-white, dms. ..... lb. .2330- —
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .1425- —
bbls., l.c.l., same basis .... lb. .1525- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 -39.00
Lithium benzoate, dms. ..... lb. 1.65 - 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30¼
Tech., dms., c.l., frt. alld ..... lb. .67 - —
dms., t.l., same basis ..... lb. .73 - —
dms., ton lots, same basis ... lb. .76 - —
dms., smaller lots, f.o.b., plant, lb. .81 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis ... lb. .88 - .92
Lithium citrate, NF, dms., ton lots, lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 2.15 - —
bbls., ton lots and more, dlvd lb. 2.18½- —
bbls., less ton lots, dlvd. .... lb. 2.23½- —
Lithium hydride, powd., dms., 500-lbs. lots or more, works, lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., l.c.l., frt. alld. ..... lb. .73 - —
Lithium manganite, dms., works lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb. 1.15 - 1.25
Lithium salicylate, dms. ..... lb. 1.60 - 1.70
Lithium silicate, dms., works .. lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works ..... lb. .48½- —
dms., less-ton lots, works .... lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works .. lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.50 - —
Resinated, bbls., works ..... lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd. E ..... lb. .09⅛- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l., dlvd. ..... lb. .12 - —
Lobelia herb, bls. ..... lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd., bgs. .... lb. .35 - .40
Lycopodium, cs. ..... lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. ..... lb. 1.70 - —
No. 2, whole, bls. ..... lb. 1.40 - —
siftings, bls. ..... lb. 1.35 - —
Mace oil, dist., cns., dms ..... lb. 9.00 -11.00
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26⅛
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, Nev ton. 39.50 - —
91%, bgs., c.l., same basis, ton. 49.50 - —
95%, bgs., c.l. same basis, ton 59.00 - —
USP, light, bgs. ..... lb. .36½- .37⅛
USP, heavy, bgs. ..... lb. .36½- .37⅛
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ton. 46.00 - —
Magnesium bromide, cs., jars lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald ..... lb. .11½- —
bgs., l.c.l., frt. equald ..... lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald ..... lb. .14 - —
bgs., l.c.l., frt. equald ..... lb. .15 - 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works lb. .12¾- —
dms., l.c.l., works ..... lb. .14 - .15



IN
EXCHANGE BRAND
LEMON OIL

THE DIFFERENCE IS THE SAMENESS

Batch after batch...year after year...the same full, tangy taste and aroma of real California lemon!

You get uniformity—for sure—with Exchange Brand Lemon Oil, U.S.P., California Cold Pressed.

The Exchange Brand label represents over 40 years of experience in the citrus business...and the world's largest supplies of lemons. From these stocks, lemons are picked and chosen...and skillfully pressed and bulk blended for matchless uniformity.

Every container—from 7-pound tin to 385-pound drum—is packed and sealed in a spotless, modern plant. Every drop is guaranteed to be pure, U.S.P. quality oil—unadulterated, unsophisticated. Always look for the word "Exchange" on the tamper-proof container seal.

Exchange

LEMON OIL, U.S.P.
California Cold Pressed

Sunkist Growers
PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

Distributed in the U.S. by:
Dodge & Olcott, Inc., 180 Varick St., New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N.Y.
Ungerer & Co., 161 Avenue of the Americas, New York 13, N.Y.

Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works.ton.55.00 - —
bgs., l.c.l., works.....ton.65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works, E..lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works..lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld..lb. .22½- —
dms., l.t.l., frt. alld. .....lb. .23½- —
tanks, frt. alld. .....lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works..lb .36 - —
pigs, 10,000-lb. lots or more, works..lb. .35¼- —
sticks, cs., works, frt. alld on carlots..lb. .59 - —
Magnesium nitrate, cryst., dms., works..lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works..100 lbs. 2.15 - —
bgs, l.c.l., works.....100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 3.10 - —
bgs., smaller lots.....100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots.....lb. .40 - —
fib. dms., 100-lb. lots.....lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTA, bbls., works..lb. 5.30 - —
Malathion, dms., c.l., works.....lb. .89 - —
dms., l.c.l., works.....lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald..lb. .24 - —
dms., l.c.l., frt. equald.....lb. .25½- —
tanks, frt. equald .....lb. .22½- —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms .....lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots..lb. 2.35 - —
dms., smaller lots.....lb. 2.40 - 2.50
Mandrake root, bls.....lb. .40 - —
Manganese acetate, dms., dlvd....lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works..lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works.....lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works..ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis.....ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis..ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms.....lb. 1.84 - —
Manganese hydrate, dms., dlvd..lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms..lb. .35¾- —
Solid, precip., 8.2% Mn. bbls lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. .....lb. .34 - —
dms., ton lots, dlvd. E. .....lb. .36 - —
dms., smaller lots, dlvd. E...lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld..lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms..lb. .29¼- —
Precip., 6½-7% Mn, dms.....lb. .37 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd., S. E..ton.86.50 - —
bgs., l.c.l., dlvd. S. E..ton.93.50 - —
Manganese tallate, 6%, dms.....lb. .26½- —
Manila copal gum, C, bgs. .....lb. .35 - .39
DBB, bgs. .....lb. .25 - .28
DK, bgs. .....lb. No stocks.
DK, dust, bgs. .....lb. .14 Nom.
MA, soft, bgs. .....lb. .20 - .24
WS, bgs. .....lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works..lb. .60 - —
fib. dms., to ton lots, works..lb. .62 - —
fib. dms., single dm., works..lb. .65 - —
Marine pitch, dms. .....lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works.....lb. .26½- —
bgs., l.c.l., works .....lb. .28 - —
Menadione, USP, bots. .....gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf..lb. .06 - —
Menthol, nat., USP, Brazilian, large crystals, cs..lb. 8.50 - —
Nat., USP, Brazilian, regular crystals, cs..lb. 8.30 - 8.40
Japanese, cs. .....lb.12.00 - —
Syn., USP, racemic, 25-lb. lots..lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld..lb. .44 - —
bgs., fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld..lb. .54 - —
bgs., fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b. works..lb. 4.03 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works..lb. 3.78 - —
Mercuric cyanide, NF VIII, powd., fib. dms..lb. 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works..lb. 6.97 - —
Mercuric oxide, red, NF IX, 50-lb. dm., 100 lbs., f.o.b. works. lb. 4.72 - —
tech., 50-lb. dm., 100 lbs., same basis..lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb. 4.89 - —
tech., dms., 100 lbs.....lb. 4.35 - —
25-lb. fib. dm. .....lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask.209.00 -212.00
Mesityl oxide, dms., c.l., dlvd....lb. .15 - —
dms., l.c.l., dlvd. .....lb. .16½- —
tanks, dlvd. .....lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works .....lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid, glacial, 99%, dms., truckloads, frt. equald..lb. .42½- —
dms., smaller lots, frt. equald. lb. .43 - .75
tanks, works, frt. equald..lb. .40 - —
Methanol, nat, denaturing grade, tanks, frt. alld..gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min., dlvd..gal. .51½- —
dms., l.c.l., dlvd. .....gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area..gal. .35 - —
tankwagon, 4,000 gal. min., dlvd..gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal..gal. .29 - —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works .....gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area..gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah, Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald..lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald..lb.27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. ....lb. 1.10 - —
dms., l.t.l., same basis.....lb. 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more..lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis..lb. 1.53 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs..lb. .66 - —
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1..lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 - .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld..gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld. E..gal. .66 - —
dms., l.c.l., frt. alld. E. ....gal. .76 - —
tanks, frt. alld. E. .....gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. .....lb. .40 - —
tanks, dlvd. .....lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E..lb. .17 - —
dms., l.c.l., dlvd. E. .....lb. .18½- —
tanks, dlvd. E. .....lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. .....lb. .18½- —
tanks, dlvd. .....lb. .14½- —
Methyl amyl ketone, dms., works. lb. 1.05 - —
N-Methylaniline, tech., tanks, frt. alld..lb. .60 - —
Methylanthranilate, cns. .....lb. 2.25 - 2.45
Methyl benzoate, cns., dms. ....lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld. lb. .62 - .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis .....lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs..lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld..lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis .....lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs..lb. .79 - .83

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
U.S.P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Methyl chloride, indust., cyls., frt. equald lb. .22¼ - —
tanks, multi-unit, same basis, lb. .16¼ - —
tanks, single unit, same basis, lb. .12¾ - —
Refrigerator mfrs., cyls., dlvd lb. .46¾ - —
Other consumers or service men, cyls., dlvd lb. .67¾ - —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 - 1.60
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½ - —
tanks, dlvd. lb. .12½ - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾ - —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .21½ - —
100-lb. multiwall paper bgs., t.l.l., works lb. 23 - —
Methyl heptin carbonate, bots lb. 27.75 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., dlvd. lb. .20½ - —
tanks, dlvd. lb. .17½ - —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl Ketone, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18½ - —
tanks, dlvd lb. .14½ - —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½ - —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼ - —
dms., l.c.l., same basis lb. .62½ - .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.30 - —
5-39 dm. lots, same basis lb. 1.35 - —
tanks, same basis lb. 1.25 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½ - —
dms., l.c.l., t.l., dlvd lb. .15¾ - —
tanks, 4,000-gal. min., dlvd lb. .12¼ - —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼ - —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½ - —
bgs., l.c.l., ex-whse. lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼ - —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 - —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse. or frt. alld. E lb. .08¾ - —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾ - —
bgs., ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ - —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 - —
tankscars, refy. gal. .49 - —
Mineral oil, white, tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., l.c.l., same basis gal. .70 - —
tankcars, refy. gal. .49 - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms., l.c.l., same basis gal. .71 - —
tankcars, refy. gal. .50 - —
NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis gal. .77 - —
tankcars, rfy. gal. .56 - —
NF, 145-155 vis., non-ret. dms., c.l., same basis gal. .78 - —
non-ret. dms., l.c.l., same basis gal. .83 - —
tankcars, refy. gal. .62 - —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ - —
non-ret. dms., l.c.l., same basis gal. .85½ - —
tankcars, refy. gal. .64½ - —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½ - —
non-ret. dms., l.c.l. gal. .87½ - —
tankcars, refy gal. .66½ - —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½ - —
non-ret. dms., l.c.l. gal. .92½ - —
tankcars, refy. gal. .71½ - —
(For f.o.b N. Y. add 2c. for tankcars; 2c. for c.l., and 3c. for l.c.l. non-ret. dms.).

Mineral orange, American, bbls., c.l., works lb. .17 - —
bbls., c.l., same basis lb. .18 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms. lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .10 - .10½
tanks, New York gal. .13½ - —
Molybdated orange, bbls. lb. .49 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½ - —
dms., l.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½ - —
dms., l.c.l., same basis lb. .11½ - —
tanks, same basis lb. .08¾ - —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½ - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½ - —
dms., l.c.l., dlvd. E., 100% basis lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½ - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½ - —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
Monomethylamine, 30-35% soln., dms., l.c.l., frt. equald, 100% basis lb. .36½ - —
tanks, frt. equald., 100% basis. lb. .26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., l.c.l., frt. equald., 100% basis lb. .33½ - —
tanks, frt. equald, 100% basis lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., l.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms., 100-lb. lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., dlvd. lb. 1.07 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 - .28
Imp., crude, Bohemian, bgs lb. .21 - .22
German, bgs. lb. .25 - .26
Morphine, cns., 100-oz., f.o.b. works. oz. 12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morpholine, dms., c.l. dlvd. E lb. .55¼ - —
dms., l.c.l., dlvd. E lb. .56¼ - —
tanks, dlvd. E lb. .52¾ - —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.40 - 4.90
cns., 25-lb. lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb. lots lb. 1.40 - —
Mustard seed, Danish, yellow, bgs. lb. .14 - —
Montana, yellow, bgs lb. .10½ - —
Oriental, bgs lb. 08 - —
Mustard, oil, syn., bots lb. 1.60 - 1.85
Myristic acid, bgs. lb. .28¼ - .30¾
tanks lb. .27¼ - —
Myrrh gum, cs lb. .65 - .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06 - —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .13½ - —
tanks, same basis lb. .10¾ - —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15¼ - —
cs., 50 lbs., c.l., same basis. lb. .15¾ - —
1-lb. pkgs., c.l., same basis. lb. .18½ - —
a-Naphthol, dms., frt. alld lb. 1.02 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .34 - —
bbls., l.c.l., works lb. .36 - —
Naphthol, ITR, red toner, bbls., works lb. 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .52 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 - —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms. gram. .13½ - —
Neopentylglycol, dms., c.l., dlvd lb. .32 - —
dms., l.c.l., same basis lb. .33 - —
Nerol, dms. lb. 4.75 - —
Neroli oil, NF, French, bots lb. 425.00 - 575.00
Tunisian, bots. lb. 400.00 - —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.40 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½ - .75½
Nickel carbonate, bbls., dlvd lb. 78¼ - .85¼
Nickel chloride, bbls., dlvd. lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb .74 - —
Nickel nitrate, dms., frt. alld lb. .31½ - .33½
Nickel oxide, black, bbls. lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd lb. .28 - —
bgs., l.c.l., dlvd. lb. .28½ - .36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd kilo. 6.50 - —
dms., less than 100 kilos, dlvd. kilo. 6.60 - 7.00
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼ - —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 - —
cbys., l.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - —
cbys., l.c.l., works E 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works E. 100 lbs. 6.75 - —
cbys., l.c.l., works E 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 - —
cbys., l.c.l., works E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½ - —
cbys., extra, l.c.l., works. lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½ - —
5-pint bots., extra, cs., l.c.l., same basis lb. .24 - .25
dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
dms., l.t.l., frt. alld. lb. .51 - —
o-Nitroaniline orange toner, kgs. lb. 1.35 - —
p-Nitroaniline, c.l., t.l., dms., frt. alld lb. .445 - —
dms., l.c.l., same basis lb. .46½ - —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., l.c.l., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½ - —
bbls., l.c.l., same basis lb. .33½ - .40½
18-20, cps., bbls., c.l., same basis lb. .39½ - —
bbls., l.c.l., same basis lb. .40½ - .42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., l.c.l., same basis lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., l.c.l., dlvd. E lb. .26½ - —
tanks, dlvd. E. lb. .22½ - —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald, N unit. 1.26 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls., t.l., min. 5 tons, same basis lb. .07½ - —
Cyls., l.c.l., l.t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works. unit-ton. 2.95 - —
Nitromethane, dms., t.l., dlvd. E lb. .25 - —
dms., l.t.l., dlvd. E lb. .26½ - —
Nitromethane prices West of Rockies are 1c higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., l.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½ - —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½ - —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., frt alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½ - —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½ - —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., l.c.l., frt. alld lb. .23 - —
tanks, frt. alld. lb. .19½ - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.34 - 1.35
West Indian, bgs. lb. 1.28 - 1.29
Nutmeg oil, USP, dist., East Indian, cns. lb. 9.00 - 12.00
West Indian, cns. lb. 9.00 - 12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .46 - .48
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger, Tex. gal. .15¾ - —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½ - —
dms., l.c.l., dlvd. Zone 1—lb. .45½ - —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½ - —
dms., l.c.l., same basis lb. .55 - —
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½ - —
tanks, works lb. .21 - —
Octyl phenol in dms., 11c. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .16 - .16½
tanks lb. .14 - —
Oleic acid, dbl.-dist. (white), dms. lb. .17½ - .20
tanks lb. .15 - —
S.d., dms. lb. .16¼ - .18¾
tanks lb. .13¾ - —
Oleo oil, extra, dms. lb. .14¾ - —
Oleostearine, dms. lb. .12½ - .12¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.30 - 2.35
Olivine, crude, works ton. 12.00 - —
20 mesh, works ton. 15.00 - —
100 mesh works ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis. oz. 21.65 - —
powd., cns., 50 lbs., same basis. oz. 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms. lb. .45 - .50
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms., lb. 2.50 - 3.25
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .20 - .30
Origanum oil, Spanish, cns lb. 1.80 - 2.30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 - 4.00
Ouricury wax, crude, bgs lb. .52 - .53
Refd., pure, bgs. lb. .58 - .60
Oxalic acid, bgs., dms., c.l., works. lb. .18 - .18¼
bgs., dms., 10,000-lb. lots, works. lb. .18¼ - .18¾
bgs., dms., smaller lots, works. lb. .19¼ - .19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1440- .1540
tanks lb. .1150- —
Palm oil acid, dist., dms. lb. .13¾- .19¼
tanks lb. .13¾- .14¼

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Palmarosa oil, cns. ..... lb. 4.45 - 6.00
Papain, powd., bots. ..... lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots .. oz. 5.00 - —
cns., smaller lots ..... oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns. oz. 7.10 - 7.35
Paprika, Bulgarian, bgs. ..... lb. .27 - —
Hungarian, bgs. ..... lb .29 - —
Spanish, bgs. ..... lb. .33 - —
Yugoslavian, bgs. ..... lb. .29 - .30
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. ..... lb. 1.21 - —
Chlorinated, kgs. ..... lb. 1.36 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —

AMP temperatures are an arbitrary 3°F. higher than ASTM.

Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld ..... lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse ..... lb. .1865- —
USP-X, fib. dms., c.l. ..... lb. .19 - —
fib. dms., 1,000-lb. lots ..... lb. .20 - —
fib. dms., smaller lots ..... lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd ... lb. .15 - —
tanks, dlvd. ..... lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld lb. .84 - —

Parathion prices 2c. per lb. higher in West.

Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls. ..... lb. .45 - .50
Patchouli oil, imp., cns. ..... lb. 5.50 - 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies ... lb. 1.00 - —

Peacock blue price 1c. higher W. of Rockies.

Peanut meal, old process, 45%, bgs., f.o.b. mills ..ton.55.00 Nom.
solvent, same basis ..... ton.50.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .16¼- —
Refd., dms. ..... lb. .21½- .21¾
tanks ..... lb. .19½- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls .lb. 1.28 - —
Imp., Danish, bbls., ex whse .... lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd .lb. .25 - —
ton lots, same basis ..... lb. .27½- —
tanks, same basis ..... lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .021 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .023 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 - 2.25
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald .lb. .21 - —
bgs., l.c.l., same basis ..... lb. .22½- .29

Pentachlorophenol in dms. 1c, higher.

Pentaerythritol, tech., bgs., c.l., dlvd .lb. .31 - —
bgs., l.c.l., dlvd. ..... lb. .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more .lb. 6.00 - —
Pepper, black, Malabar, bgs. ..... lb. .56 - —
Lampong, bgs. ..... lb. .56 - —
Red, Funtuas, bgs. ..... lb. .32 - —
Japanese, Hontoka, bgs. .... lb. .37½- —
Santaka, bgs. ..... lb. .31½- —
Sudanese, bgs. ..... lb. .36 - —
White, Muntok, bgs. ..... lb. .83 - —
Peppermint leaves, dom., USP, bls., dms. .lb. .70 - .75
Imp., USP, bls. ..... lb. .85 - —
Peppermint oil, nat., dms. ..... lb. 4.00 - 4.60
Redist., USP, dms. ..... lb. 4.25 - 5.25
Perchloroethylene, dms., c.l., or t.l., dlvd .lb. .13½- —
dms., l.c.l., dlvd. ..... lb. .15¼- —
tanks, dlvd. ..... lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd .lb. .12¼- —
Peri acid, dry, bbls., frt. alld ..... lb. 1.60 - —
Paste, bbls., frt. alld ..... lb. 1.55 - —
Peru balsam, dms. ..... lb. 1.10 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms .lb. 2.40 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. ..... lb. .10125-.11375
tanks, refy. ..... lb. .05875- —
Extra amber, dms., c.l., refy .lb. .07125- —
dms., l.c.l., dlvd. ..... lb. .09125-.10375
tanks, refy. ..... lb. .04875- —
Petrolatum, lily white, dms., c.l., refy .lb. .08625- —
dms., l.c.l., dlvd. ..... lb. .10625- .12
tanks, refy. ..... lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd .lb. .11125- .125
tanks, refy. ..... lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy .lb. .07125- —
dms., l.c.l., dlvd. ..... lb. .095 - .10375
tanks, refy. ..... lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works ..... lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works. lb. .16 - —
non-ret. dms., l.c.l., works. lb. .17 - —
tanks, works ..... lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms., l.c.l., same basis ..... lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis ..... lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies .lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis ..... lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non-ret dms., l.c.l., same basis. lb. .17½- —
tanks, same basis ..... lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., l.c.l., same basis. lb .19 - —
tanks, same basis ..... lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld .lb. .18½- —
dms., same basis ..... lo. .20½- —
tanks, same basis ..... lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld. lb. 1.30 - —
250-lb. dm., same basis ..... lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd .lb. .44 - —
fib. dms., l.t.l., same basis .lb .47 - —
NF, fib. dms., t.l., same basis .lb. .43 - —
fib. dms., l.t.l. same basis .lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 - —
100%, bots. ..... lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works ..lb. 27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E .lb. .41 - —
dms., l.c.l., dlvd. E. ..... lb. .42½- —
tanks, dlvd. E. ..... lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 - —
o-Phenylenediamine, coml, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works .lb. .75½- —
dms., l.c.l., same basis ..... lb. .77 - —
Phenylethyl acetate, bots. ..... lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms. ..... lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld. lb. 1.50 - —
dms., smaller lots, frt. alld. ... lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots. lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. 1.80 - —
fib. dms., smaller lots, dlvd. E .lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works ..... lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. ..... lb. .33¼- .37
seeds, bgs. ..... lb. .20 Nom.
sorts, bgs. ..... lb. .20 - .24
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works ..... lb. 17.75 - —
Tech., fib. dms., works ..... lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works ..... lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 5.298 - —
68-70%, b.p.l., bulk, c.l., same basis .short-ton. 5.648 - —
70-72%, b.p.l., bulk, c.l., same basis .short-ton. 6.228 - —
74-75%, b.p.l., bulk, c.l., same basis .short-ton. 7.128 - —
76-77%, b.p.l., c.l., bulk, same basis .short ton. 8.018 - —

Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald .100 lbs. 7.00 - —
cbys., l.c.l., same basis .100 lbs. 7.25 - 7.75
tanks, t.w., works ....100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald .100 lbs. 7.85 - —
cbys., l.c.l., works ...100 lbs. 8.10 - 9.35
tanks, t.w., works ....100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., l.c.l., works ....100 lbs. 8.75 - 9.00
tanks, t.w., works ....100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works. .lb. .55 - —
dms., smaller lots, works. .lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald .lb. .20 - .20½
dms., l.c.l., works, frt. equald .lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works .lb. .14 - —
dms., l.c.l., works ..... lb. .15 - —
tanks, works, frt. equald .... lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works. .lb. .13½- —
dms., l.c.l., works ..... lb. .14½- .15½
Solid, dms., c.l., works ..... lb. .11½- —
dms., l.c.l., works ..... lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works. .lb. .1375- .1475
dms., l.c.l., works ..... lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works. .lb. .38 - —
dms., l.c.l., works ..... lb. .39 - .40
Phosphorus trichloride, dms., c.l., works. .lb. .14 - —
dms., l.c.l., works ..... lb. .15 - —
tanks, works ..... lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald. .lb. .19 - .23
bgs., l.c.l., same basis ..... lb. .20 - .24
tanks, same basis ..... lb. .18½- .22½
Phthalimide, 97-98%, dms., frt. alld. .lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis ....lb. 2.75 - —
Water dispersable, bbls., same basis. .lb. 1.52 - —

Pythalocyanine blue prices 1c. higher W. of Rockies.

Phthalocyanine green toner, bbls., works. .lb. 3.35 - —
Resinated, bbls. ..... lb. 3.00 - —
Water dispersable, bbls. ..... lb. 1.71 - —

Phthalocyanine green prices 1c. higher W. of Rockies.

Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more. .lb. 5.00 - —
NF, fib. dms. ..... lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald .lb. .42 - .46
dms., l.c.l., works, frt. equald. .lb. .422 - .46½
tanks, same basis ..... lb. .41½- .43
b-Picoline, 98%, dms., t.l., works. lb. 1.05 - —
dms., l.c.l., same basis ..... lb. 1.15 - —
tanks, same basis ..... lb. .95 - —
b,g-Picoline, 5°C, dms., c.l., works. lb. .32½- —
dms., l.c.l., works ..... lb. .33 - —
g-Picoline, dms., f.o.b., works .lb. 1.60 - —
tanks, t.l., same basis ..... lb. 1.50 - —
Picric acid, NF, bbls. ..... lb. .85 - —
Tech., bbls. ..... lb. .44 - —
Pigment green B, kgs. ..... lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots. .oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials. oz. 5.15 - —
Pimento, Jamaincan, bgs. ..... lb. .68½- —
Mexican, bgs. ..... lb. .56 - —
Pimento berry oil, NF, dms. .... lb. 3.75 - 9.25
Pimento leaf oil, crude, cns. .... lb. 2.20 - 2.60
Pine oil, dest.-dist., dms., l.c.l. works .lb. .15 - —
dms., l.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York .lb. .185 - —
dms., dlvd. ..... lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pink root, bls. ..... lb. 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld .lb. 1.80 - —
dms., l.c.l., same basis ..... lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld .lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld .lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld. .lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld lb. 1.06 - —
Piperidine, dist., 98% min., dms., c.l., t.l., frt. equald .... lb. 2.55 - —
Piperonyl butoxide, dms., dlvd. E.lb. 4.50 - 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works ..... oz. 81.00 -85.00
Pleurisy root, bls. ..... lb. .45 - .50
Podophyllum resin, NF, dms. .... lb. 12.50 - —
Poke root, bls. ..... lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more .1,000.000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works .lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works ..... lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works .lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works .... lb. .47 - .49
Pontianak copal gum, chips, bgs .lb. .25 - —
Nubs, bgs. ..... lb. .37 - .40
Poppy seed, Argentine, bgs. .... lb. No stocks.
Dutch, bgs. ..... lb. .18 - —
Danish, bgs. ..... lb. .16½- —
Polish, bgs. ..... lb. .17½- —
Turkish, bgs. ..... lb. .13½- —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis. 100 lbs. 5.25 - —
tanks, same basis .... 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis .100 lbs. 9.55 - —
reg., flake, 88-92%, dms., l.c.l., same basis .100 lbs. 11.05 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 9.10 - —
dms., l.c.l., works .... 100 lbs. 10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E. .lb. .31 - —
Potassium bicarbonate, USP, gran. dms. .lb. .22 - —
powd., dms. ..... lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works. .lb. .18 - —
bgs., l.c.l., works ..... lb. .18½- .19¼

Potassium bichromate in dms. ¾c. higher.

Potassium bitartrate, NF, gran., powd., 100-lb. bgs. c.l., frt. equald .lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis .lb. .38 - —
100-lb. bgs., smaller lots, same basis .lb. .40 - —
Potassium borohydride, powd., dms., works. .lb. 16.00 -22.00

Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.

Potassium bromate, dms., 1,000-lb. lots or more, works .lb. .50 - —
dms., smaller lots, works ..... lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs .lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls., dms .lb. .20 - —
Dom., tech., powd., bbls., dms .lb. .21 - .22
Dom., calcinated, bgs., c.l., works. 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works. .100 lbs. 7.10 - —
bgs., l.c.l., works. ... 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works .lb. .12¼- —
dms., l.c.l., works ..... lb. .13½- .14½
Powd., dms., c.l., works ..... lb. .12¾- —
dms., l.c.l., works ..... lb. .14 - .15
works .lb. .12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works .lb. .16¾- —
NF, gran., 25-lb. metal dms ... lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works .lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works .ton. 29.00 - —
bgs., c.l., works ..... ton. 33.50 - —
99.3% KCL, bulk, c.l., works. ton. 28.00 - —
bgs., c.l., works ..... lb. 32.50 - —
USP, cryst., dms. ..... lb. .20 - .22
USP, gran., dms. ..... lb. .21 - .23
USP, powd., dms. ..... lb. .24 - .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works .lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis. lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, works .lb. .42½- —
dms., 2,000-19,999-lb. lots, works. lb. .43 - —
dms., smaller lots, works ..... lb. .44 - .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works .lb. .50 - —
dms., smaller lots, works ..... lb. .65 - —
Potassium ferrocyanide, dms., ton lots .lb. .24½- —
dms., smaller lots ..... lb. .29 - —
Potassium fluoborate, fib. dms., c.l., works .lb. .30 - —
fib. dms., l.c.l., works ..... lb. .31 - —
Potassium fluoride, dms., works .lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms .lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots .lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots .lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, min. 20% K_2O, bulk, c.l., works, unit-ton. .17 - .1763
Potassium metabisulfite, gran., dms., lb. .16 - —
Powd., dms. ..... lb. .27 - —
Potassium muriate, standard, bulk, c.l., works .unit-ton. .33 - .35
bagged 60% minimum K_2O, same basis ton. 24.80 -26.00
Gran., bulk, c.l., works .unit-ton. .34 - .36
bagged, 60% minimum K_2O, same basis .ton. 25.40 -26.40

Inside prices apply to material contracted for prior to July 1, 1959.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots .100 lbs. 17.00 - —
bbls., smaller lots ....100 lbs. 18.00 -19.00
gran., bgs., 20-ton lots ..100 lbs. 9.50 - —
bgs., smaller lots .....100 lbs. 11.00 -12.00
powd., bgs., 20-ton lots ..100 lbs. 10.50 - —
bgs., smaller lots ....100 lbs. 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works .ton. 219.50 - —
dms., ton lots, ex whse ....ton. 311.00 - —
dms., smaller lots, ex whse .ton. 316.00 - —

Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works .lb. .18½- —
dms., l.c.l., works ..... lb. .19 - .20
Potassium permanganate, coml., kgs., works .lb. .25 - .33
USP, dms., works ..... lb. .29 - .35
Potassium persulfate, dms., c.l., works .lb. .17½- —
dms., l.c.l., works ..... lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works .lb. .15½- .18¼
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1.2.0, dms., c.l., works .100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works ..... 100 lbs. 7.25 - 7.65
tanks, works ..... 100 lbs. 6.15 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works .100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works .100 lbs. 6.70 - —
tanks, works ..... 100 lbs. 5.60 - —
Potassium silicate, glass grade, bgs., c.l., works .100 lbs. 17.30 -18.00
bgs., l.c.l., works ..... 100 lbs. 17.80 - —
Soln., 29° Be, 1:2.5, dms., c.l., works .100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works .100 lbs. 5.70 - —
tanks, works ..... 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works. lb. .09½- .10

Potassium silicofluoride in drums, 0.4c. per lb. higher.

Potassium stannate, dms., frt. alld. E .lb. .784 - .857
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works .unit-ton. .62½- .64¼

Inside price applies to tonnage contracted for prior to July 1, 1959.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms., lb. .31 - .33
NF VII, gran., dms. lb. .18½- —
NF VII, powd., dms. lb. .16 - .17
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price. ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., works E lb..42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works lb. .52½- .55
Pregnenolone, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb. 2.40 - —
dms., 500 lbs lb. 2.45 - —
dms., 100 lbs lb. 2.50 - —
Progesterone, USP, bots gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Propenyl guaethol, dms. lb.24.30 -27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works lb. .89 - —
dms., l.c.l., t.t.l., same basis lb. .90 - —
tanks, same basis lb. .87 - —
Propionic acid, syn., pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .24¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - .15
dms., l.c.l., dlvd lb. .15½- .16½
tanks, dlvd. lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
n-Propylene dichloride, consumers', dms., c.l., dlvd, E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd, E lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., dlvd, E lb. .17 - —
dms., l.c.l., same basis lb. .18¾- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd E. lb. .17 - —
dms., l.c.l., dlvd. E lb. .18½- —
tanks, dlvd. E lb. .14½- —
Psyllium seed, black, bgs lb. .30 - .35
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅜- .04¼
bgs., smalder lots lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs, ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs. ton.60.00 - —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purif, 20%, dms., works lb.11.00 -11.35
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.55 - —
dms., l.c.l., same basis gal. 2.70 - —
Refd., 2°, non-ret. dms., c.l., same basis lb. .69½- —
dms., l.c.l., same basis lb. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works kilo.95.00 -100.00
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 - —
Pyrogallol, NF, 100-lb. dms lb. 3.50 - —
Pyroxylin, USP, bots lb. 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 1.30 - 1.40
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½- —
Quinine, NF, 1,000-oz. dm oz. .3105- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz. dm. oz. .3030- —
Quinine sulfate USP, 1,000-oz. dm. oz. .2575- —
Quinoline, dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

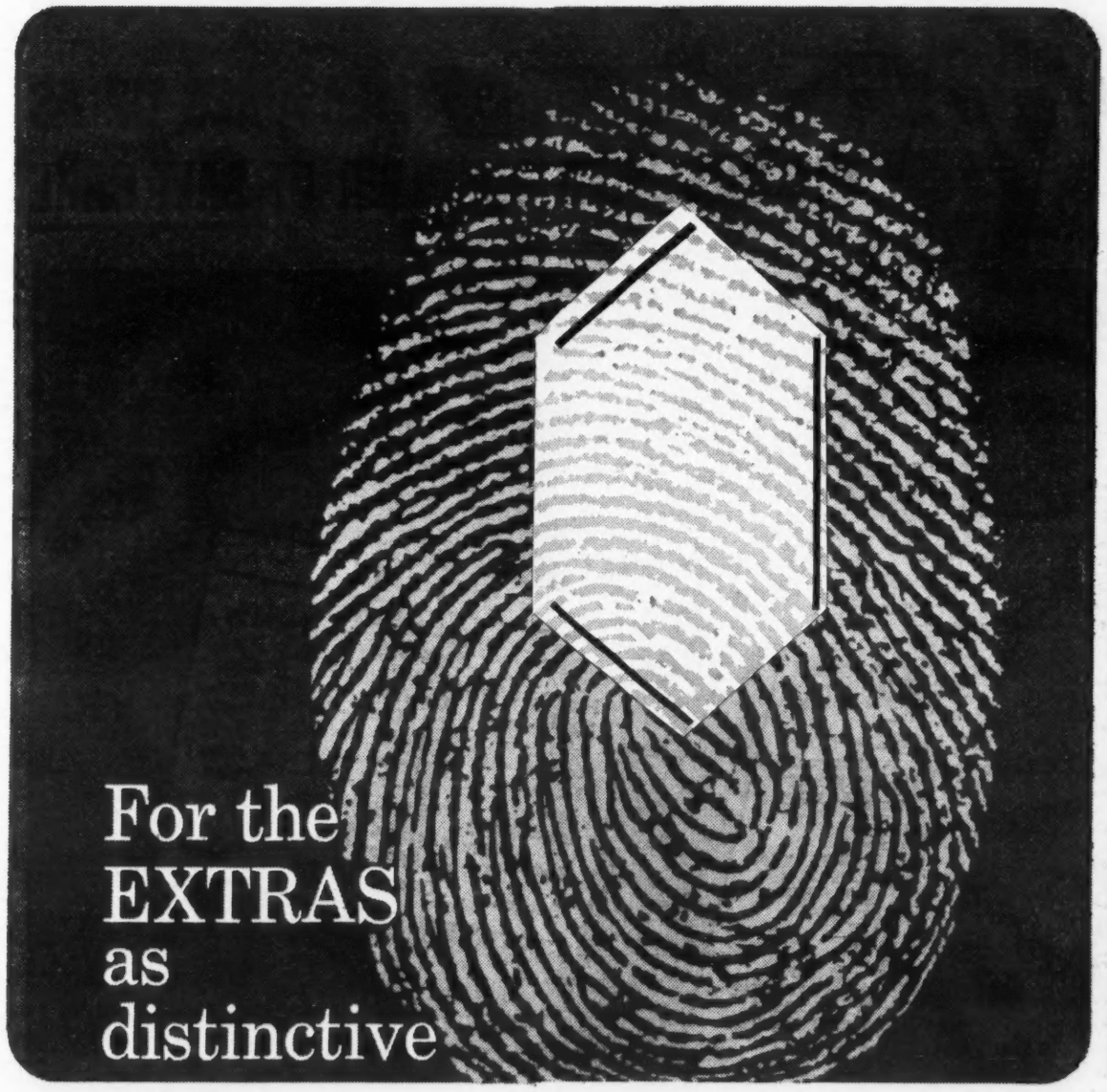
R salt paste, dms., frt. alld., 100% basis lb. .98 - —
Powd., frt. alld. 100% basis lb. 1.06 - —
Rapeseed oil, dms lb. .15 - .15½
tanks lb. .13 - —
Rare earth oxalate, NF, 45-50%, bgs, works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst., bots gram. 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77¼- —
dms., l.c.l., same basis lb. .78½- —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb.42.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
tanks, same basis lb. .14½- —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, USP, readily soluble, lots, dlvd kilo.13.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo.104.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .14 - .14½
tanks, dlvd. E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots. lb.560.00 -750.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 - 1.40
Spanish, tech., cns., dms lb. .50 - 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .12 - —
Resin, 25-45%, fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots lb. 2.75 - 3.00
Rutin, NF, fib. dms., 10 kilo lots. kilo.13.00 - —
fib. dms., 5 kilo lots kilo.13.50 - —
fib. dms., 1 kilo kilo.14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1755- .18
tanks, Atl. Coast lb. .1555- —
Saffron, Mancha Superior, tins lb. .70 - —
Safrol, dms. lb. .63 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns. lb .18 - —
Sage oil, clary, bots. lb.15.50 -17.00
Dalmatian, cns. lb. 2.85 3.25
Spanish, cns lb. 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.05 - —
Salicylic acid, tech., fib. dms., c.l., t.l., dlvd lb. .40½- —
fib. dms., l.c.l., dlvd lb. .44¾- —
Salicylic acid, USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more. lb. .51¾- —
200-lb. fib. dms., less than 1,000 lbs lb. .54¾- —
100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —



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Salt—Sodium Gluconate

Salt, table vacuum, common, fine, paper bgs., c.l..100 lbs. 1.34 • —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis..ton.28.00 • —
Saltpeter (see Potassium nitrate).
Sandalwood, E. Indian, chips, bgs., lb. .55 • .66
powd., fib. dms.....lb. .75 • .76
Sandalwood oil, cns.....lb.21.00 • —
Sarcosine, tech., tanks, f.o.b., works, frt. equald. lb. 1.03 • —
lb. No stocks.
Sardine oil, crude, tanks, Pac. coast.
Sassafras oil, artif., dms.....lb. .45 • —
Nat., dom., dms.....lb. 1.40 • —
Savory oil, cns.....lb. 4.75 • —
Schaeffer's salt, paste, dms., frt. alld. 100% basis..lb. .85 • —
Powd., bgs., frt. alld., 100% basis. lb. .95 • —
Scopolamine hydrobromide, USP, bots..oz.13.00 • —
Sebacic acid, CP, bgs., c.l., works. lb. .69½- —
bgs., l.c.l., works.....lb. .71½- —
Purified, bgs., c.l., works....lb. .65½- —
bgs., l.c.l., works.....lb. .67½- —
Seidlitz mixture, fib. dms., 5,000-lb. lots..lb. .30½- —
fib. dms., smaller lots.....lb. .31 • .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 • —
Senega root, bls.....lb. 3.00 • —
Senna leaves, Alexandria, whole and half, bls..lb. .20 • .22
siftings.....lb. .16 • —
Tinnevelly, No. 1, bls.....lb. .22 • —
No. 2, bls.....lb. .18 • —
No. 3, bls.....lb. .14 • —
pods, bls.....lb. .28 • —
powd., bbls., bxs.....lb. .17 • —
Serpentaria root,, bls.....lb. 6.50 • —
Sesame oil, USP, dms.....lb. .38 • .39
Sesame seed, Colombian, bgs....lb. .15½- —
Lebanese, hulled, bgs.....lb. .19 • —
Nicaraguan, hulled, bgs.....lb. .24 • —
nat., bgs.....lb. .14 • —
Salvadorian, Nat., bgs.....lb. .16 • —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots..lb. .46 • —
dms., l.c.l., works.....lb. .22 • .30½
bbls., 1,500-lb. lots.....lb. .47 • —
kgs., 1,500-lb. lots.....lb. .48 • —
Bonedry shellacs prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots..lb. .56 • —
bbls., 1,500-lb. lots.....lb. .57 • —
kgs., 1,500-lb. lots.....lb. .58 • —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 • .39
lemon No. 2, bgs., 10-bg. lots, lb. .34 • .37
superfine, bgs., 10-bg. lots....lb. .32 • .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works..gal. .37 • —
dms., l.c.l., works.....gal. .48 • —
tanks, works.....gal. .25 • —
Sienna pigment, burnt, paper bgs., c.l., works..lb. .06¼- .18½
paper bgs., l.c.l., works....lb. .06¾- .17¾
Raw, paper bgs., c.l., works..lb. .06¾- .16¾
paper bgs., l.c.l., works....lb. .07 • .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works..ton.25.00 • —
bgs., l.c.l., works, ex whse. ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works..ton.20.00 • —
bgs., l.c.l., works.....ton.25.00 • —
99½%, 140 mesh, bgs., c.l., works..ton.15.00 • —
bgs., l.c.l., works.....ton.20.00 • —
Silicon tetrachloride, tech., dms., c.l., works..lb. .18 • —
tanks, works.....lb. .17 • —
Silver bullion, ingots, cs..Troy oz. .91⅜- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots.....oz. .95¼- —
bots., 100-oz. lots.....oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works..oz. .67¼- —
bots., 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots..oz. 1.46 • —
Snakeroot oil, Canada, cns.....lb.40.00 -43.00
Soapbark, crushed, bls.....lb. .30 • .35
Powd., bls.....lb. .35 • .40
Whole, bls.....lb. .20 • .25

Soda ash, dense, 58%, paper bgs., c.l., works..100 lbs. 1.90 • —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 • 4.77
bulk, c.l., works.....100 lbs. 1.60 • —
Light, 58%, paper bgs., c.l., works..100 lbs. 1.85 • —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 • 4.73
bulk, c.l., works.....100 lbs. 1.55 • —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald..100 lbs. 5.20 • —
liq., 50%, sellers' tanks, works, dry basis..100 lbs. 2.90 • —
50%, rayon type, sellers' tanks, works, dry basis..100 lbs. 2.90 • 3.00
Soda, caustic, liq, 73%, sellers' tanks, works, dry basis. 100 lbs. 3.00 • —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 • 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 • —
Soda, sal, conc., bgs., c.l., works. 100 lbs. 2.50 • —
bgs., smaller lots, works 100 lbs. 2.80 • —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60%, gran., dms., c.l., works. lb. .15½- —
dms., l.c.l., works.....lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 • —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted..lb. 1.90 • —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E.....lb. .29 • —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works lb. .24 • —
ton lots or more, same basis. lb. .23½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, leaders, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 • .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works..kilo.10.00 • —
10-kilo dm., same basis.....kilo.10.35 • —
5-kilo dm., same basis.....kilo.10.75 • —
1-kilo bot., same basis.....kilo.11.00 • —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld..lb. .35 • —
dms., l.c.l., same basis....lb. .39 • —
USP, dms., c.l., t.l., frt. alld..lb. .38 • —
dms., ton lots, same basis...lb. .43 • —
dms., 1,000-lb. lots, same basis. lb. .45 • —
Sodium bicarbonate, USP, gran., bgs., c.l., works..100 lbs. 2.95 • —
bgs., l.c.l., works....100 lbs. 3.85 • —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 • —
bgs., l.c.l., works.....100 lbs. 3.45 • —
Sodium bichromate, gran., bgs., c.l., t.l., works..lb. .13 • —
bgs., l.c.l., works.....lb. .13½- .14¾
Sodium bichromate in dms. ⅜c. per lb. higher.
Sodium bifluoride, bbls., c.l., works, frt. equald..lb. .19½- —
bbls., l.c.l., same basis.....lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 • —
dms., c.l., frt. equald.....100 lbs. 3.00 • 3.60
dms., l.c.l., frt. equald.....100 lbs. 3.50 • 4.10
Sodium bisulfite, annyd., bgs., c.l., works..100 lbs. 5.00 • —
bgs., l.c.l., works.....100 lbs. 5.45 • —
Soln., 35°, bbls., c.l., works.100 lbs. 1.70 • —
bbls., l.c.l., works.....100 lbs. 2.20 • —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works..lb.19.90 • —
dms., l.c.l., works.....lb.33.00 -40.00
Sodium borohydride, stabilized water soln., 12% NaBH, 100% basis, dms., works..lb.15.00 • —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb. lots.
Sodium bromide, USP, gran., dms., works lb. .40 • —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works..100 lbs. 3.10 • —
bgs., l.c.l., works.....100 lbs. 3.50 • —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works..lb. .09 • —
dms., l.c.l., works.....lb. .09½- .10¼
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 • —
Sodium chlorite, tech., dms., c.l., works lb. .58 • —
dms., 20-dm. lots or more, works. lb. .66 • —
dms., smaller lots, works ..lb. .70 • .73
Sodium chloroacetate, tech., dms., c.l., works..lb. .27 • —
dms., l.c.l., works.....lb. .28 • —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works..lb. .14¾- —
fib. dms., l.c.l. works.....lb. .15¼- .16¼
Sodium chromate tetrahydrate, bgs., c.l., t.l., works..lb. .1015- —
bgs., l.c.l.....lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E lb. .62 • —
NF VIII, gran, bgs., c.l., same basis lb. .26 • —
USP XIV, gran., bgs., c.l., same basis..lb. .29 • —
Sodium citrate, USP, powd. prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works..lb. .85 • —
dms., smaller lots, works.....lb. .90 • 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots..lb. .176 • —
dms., same basis, 5,000 to 19,999-lb. lots..lb. .188 • —
dms., same basis, 1,000 to 4,900-lb. lots..lb. .198 • —
Sodium cyclamate, 100-lb. dm., f.o.b. works..lb. 1.95 • —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works..lb. .18 • —
250-lb. dms., l.c.l., works....lb. .16¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works..lb. .15 • —
250-lb. dms., l.c.l., works.....lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 • —
dms., l.c.l., t.l., same basis..lb. .47 • .52
tanks, same basis.....lb. .38 • —
Sodium ferrocyanide, bgs., 10-ton lots..lb. .13½- —
bgs., smaller lots.....lb. .14¼- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald..lb. .1390- —
fib. dms., l.c.l., works, frt. equald..lb. .1465- —
Sodium formate, bgs., c.l., works. 100 lbs. 7.05 • —
bgs., l.c.l., ex whse.....100 lbs. 8.65 • —
Sodium gentisate, 100-lb. fib. dms.lb. 5.50 • —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 • —
Tech., bgs., c.l., t.l., same basis lb. .34 • —

By every standard... WEST END MEASURES UP AS THE QUALIFIED SUPPLIER OF SALT CAKE
• ACCURATE PROCESSING OF ORDERS
• UNIFORMLY HIGH QUALITY
• ABUNDANT STORAGE
• FLEXIBLE AND EFFICIENT LOADING AND SHIPPING
• EXTENSIVE PRODUCTION CAPACITY
• VAST NATURAL SOURCE OF RAW MATERIAL
• ALL COMMITMENTS SCRUPULOUSLY MET
• FRIENDLY, HELPFUL ATTENTION TO INDIVIDUAL NEEDS
• PROMPT, AUTHORITATIVE ANSWER TO EVERY INQUIRY
However you view your needs, you will find in West End a unique coordination of specialized services, extensive production facilities and product excellence essential to the prompt, efficient handling of individual requirements.
Uniformly high quality
SALT CAKE
TYPICAL ANALYSIS
Typical % Guaranteed %
Na_2SO_4 . 99.57 -99.87 . . 99.5 Min.
NaCl . . . .06 -.14 . . . .2 Max.
B_2O_3 . . . .03 -.06 . . . .1 Max.
CO_2 . . . .02 -.04 . . . .05 Max.
Na_2O . . . .05 -.09 . . . .1 Max.
H_2O . . . .01 -.10 . . . .2 Max.
Insoluble . . .001-.01 . . . .05 Max.
Density: Struck Approx. 75 lbs./cu. ft. Tapped Approx. 88 lbs./cu. ft.
Solution . . . Clear Color . . . White
Production techniques and controls developed at West End maintain the traditional quality of our product, even as we produce it in ever-increasing quantities. We submit West End as a chemical of highest purity and offer the above analysis for your consideration.
Stauffer CHEMICALS SINCE 1885
75 YEARS OF SERVICE TO INDUSTRY AND AGRICULTURE
WEST END CHEMICAL COMPANY • DIVISION OF STAUFFER CHEMICAL COMPANY
636 CALIFORNIA, SAN FRANCISCO 8, CALIF. • PLANT: WESTEND, CALIF.

Sodium hydride, 50% soln. in oil, dms., works..lb. 1.25 - 2.50
85% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point. lb. 2.20 - —
dms., 50-99 lbs., same basis..lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs. or more, same basis..lb. .95 - —

Sodium hydrosulfide (see Sodium sulfhydrate).

Sodium hydrosulfite, dms, c.l., frt. alld..lb. 23½- —
dms., l.c.l., frt. alld. .....lb. .25¾- —

Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots. lb. .23½- .28

Sodium hydroxide, tech. (see Soda, caustic).

Sodium hypophosphite, NF, dms., 1,000-lb. lots..lb. .99 - —

Sodium hyposulfite (see Sodium thiosulfate).

Sodium iodide, USP, 300-lb. dms., f.o.b. works..lb. 1.98 - —

Sodium lauryl sulfate, dms., c.l., dlvd..lb. .20½- —
dms., l.t.l., dlvd. .....lb. .21½- —
tanks, dlvd. .....lb. .19½- —

Sodium lignin sulfonate, bgs., c.l., works..100 lbs. 4.25 - 6.50
l.c.l., bgs., works.....100 lbs. 4.40 - 7.00

Sodium metabisulfite (see Sodium bisulfite).

Sodium metaborate octahydrate, gran., bgs., c.l., works ton.210.00 - —
bgs., ton lots, ex whse..100 lbs. 8.00 - —
bgs., smaller lots, ex whse. 100 lbs. 9.25 -11.25

Tetrahydrate, bgs., c.l., works. ton.210.00 - —
bgs., ton lots, ex whse..100 lbs.13.93 - —
bgs., smaller lots, ex whse. 100 lbs.15.18 -17.18

Sodium, metallic, bricks, c.l., works. lb. .21 - —
Fused, 18,000-lb. lots or more, works..lb. .19½- —
tanks, works .....lb. .17 - —

Sodium metalinate, bbls., frt. alld. lb. .62 - —

Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt..100 lbs.11.10 - —
bgs., l.c.l., same basis..100 lbs.11.85 - —
dms., c.l., same basis.....100 lbs.11.70 - —
dms., l.c.l., same basis....100 lbs.12.45 - —

Sodium metasilicate, anhyd., bgs., c.l., works..100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works.....100 lbs. 6.20 - —
dms., l.c.l., works.....100 lbs. 6.55 - —

Sodium metasilicate pentahydrate, bgs., c.l., works..100 lbs. 4.45 - —
bgs., l.c.l., works.....100 lbs. 4.80 - 6.75
dms., l.c.l., works.....100 lbs. 4.95 - —
dms., l.c.l., works.....100 lbs. 5.30 - 7.25

Sodium molybdate, anhyd., dms., works, frt. equald..lb. .92 - .99
Cryst., dms., works, frt. alld..lb. .74 - .76

Sodium monoglutamate (see Monosodium glutamate).

Sodium monohydrate (see Sodium carbonate, monohydrated).

Sodium naphthionate, bbls. .....lb. .72 - —

Sodium nitrate, dom., crude, bgs., c.l., works..ton.48.00 - —
bulk, c.l., works.....ton.44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse..ton.48.00 - —
bulk, c.l., same basis....ton.44.00 - —

Sodium nitrite, USP, bbls., c.l., works, frt. equald..100 lbs. 9.00 - —
bbls., l.c.l., same basis..100 lbs.11.00 - —

Sodium orthosilicate, conc., dms., c.l., works..100 lbs. 6.70 - —
dms., l.c.l., works.....100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works.....100 lbs. 7.60 - 7.90

Sodium oxalate, 88%, bgs., works. 100 lbs.12.35 - —
99%, bgs., works..100 lbs.15.40 - —

Sodium para-aminobenzoate (see Sodium p-aminobenzoate).

Sodium para-aminosalicylate (see Sodium p-aminosalicylate).

Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald..lb. .26 - —
dms., l.c.l., same basis.....lb. .27½- .34
Pellets, dms., c.l., same basis..lb. .26 - —
dms., c.l., same basis.....lb. .27½- .34
Powd., dms., c.l., same basis....lb. .25 - —
dms., l.c.l., same basis.....lb. .26½- .33

Sodium pentabarbital, USP, dms., 100 lbs. or more..lb. 6.00 - —

Sodium perborate, NF, tech., bgs., c.l., works..lb. .18¼- —
bgs., l.c.l., works .....lb. .19 - .21

Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss..lb. .21½- —
dms., l.c.l., same basis.....lb. .22 - .22½

Sodium phenobarbital, USP, 100-lb. dms..lb. 3.75 - —

Sodium phenosulfonate, USP, IX, gran., dms..lb. .52 - .53
NF, powd., dms. .....lb. .55 - .56

Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald..100 lbs. 7.95 - —
bgs., l.c.l., same basis..100 lbs. 8.35 - 9.40
Dibasic, cryst., bgs., c.l., t.l., frt. equald..100 lbs. 4.60 - —
bgs., l.c.l., frt. equald..100 lbs. 5.00 - 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald..100 lbs. 7.60 - —
bgs., l.c.l., same basis..100 lbs. 8.10 - —
USP, dried, powd., bgs., dms., works..lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald..100 lbs. 9.00 - —
bgs., l.c.l., same basis..100 lbs. 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald..100 lbs. 9.00 - —
bgs., l.c.l., frt. equald..100 lbs. 9.45 -10.05

Sodium phosphate in dms. 60c. to 80c. higher than bgs.

Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald..lb. .90 - —

Sodium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .34½- —

Prices W. of Rockies 3c. per lb. more.

Sodium prussiate, yellow (see Sodium ferrocyanide).

Sodium pyrophosphate acid, bgs., c.l., works, frt. equald. 100 lbs.11.10 - —
bgs., l.c.l., same basis..100 lbs.11.85 12.35

Sodium pyrophosphate, ferric, dms., c.l., t.l., works..lb. .36 - —
dms., l.c.l., works.....lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald..100 lbs. 7.81 - —
bgs., l.c.l. same basis..100 lbs. 9.21 - 9.71

Sodium salicylate, USP, dms., 1,000-lbs. or more..lb. .78¼- —
dms., less than 1,000 lbs., dms.lb. .81½- —

Sodium sesquicarbonate, bgs., c.l., works..100 lbs. 2.35 - —

Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1..100 lbs. 4.10 - 4.35
dlvd. zone 2.....100 lbs. 4.35 - 4.60
dlvd. zone 3 .....100 lbs. 4.75 - 4.90
dlvd. zone 4 .....100 lbs. 5.35 - 5.60

Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works..100 lbs. 5.70 - —
dms., c.l., t.l., works....100 lbs. 6.20 - —

Sodium sesquisilicate, hydrated, bgs., c.l., works..100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works..100 lbs. 5.35 - —
dms., c.l., works..100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —

Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works..100 lbs. 1.90 - 2.40
tanks, works .....100 lbs. 1.20 - —
47° Be., 1:2.9, turbid, dms., c.l., works..100 lbs. 2.25 - —
dms., l.c.l., works..100 lbs. 2.60 - 3.45
tanks, works .....100 lbs. 1.90 - —
52° Be, 1:2.4, turbid, dms., c.l., works..100 lbs. 2.65 - —
dms., l.c.l., works....100 lbs. 3.00 - 3.50
tanks, works .....100 lbs. 2.30 - —

Solid, 1.3.2, bgs., works.....ton.67.50 - —

Sodium silicofluoride, bgs., c.l., works..lb. .065 - —
bgs., l.c.l., works.....lb. .725- —

Sodium silicofluoride in dms., 0.4c. per lb. higher.

Sodium stannate, dms., works, frt. alld. E..lb. .642 - .702

Sodium sulfa drugs (see Sulfa name).

Sodium sulfanilate, bbls., works..lb. .22 - —

Sodium sulfate, NF VII, dried, powd., dms..lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton.54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works..ton.36.00 - —
bulk, c.l., works....ton.32.00 - —
USP, cryst., fib. dms. .....lb. .17½- .18

Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald..lb. .07¼- —
dms., l.c.l., same basis..lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis..ton.130.00 - —

Sodium sulfide, flake, dms., c.l., works, E., frt. equald..lb. .06 - —
dms., l.c.l., same basis.....lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald..lb. .05½- —
bbls., l.c.l., same basis.....lb. .06½- —

Sodium sulfite, anhyd., powd., bgs., c.l., works..100 lbs. 7.55 - —
bgs., l.c.l., same basis..100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works. 100 lbs. 3.50 - —
bgs., t.l., same basis..100 lbs. 4.00 - —

Sodium sulfocyanide, CP (see Sodium thiocyanate).

Sodium tetraborate (see Borax).

Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald..lb. .04½- —
dms., l.c.l., same basis....lb. .05½- —

Sodium thiocyanate, CP, dms. ....lb. .55 - .63
Tech., anhyd., dms., 1 ton lots or more, works..lb. .317 - —
dms., less than ton lots, works..lb. .337 - —

Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 7.75 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald..100 lbs. 8.15 - —

Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald..lb. .0775- —
64-lb. bgs., l.c.l., l.t.l., frt. equald..lb. .0815- —

Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 4.95 - —

Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., l.t.l., frt. equald..100 lbs. 5.20 - —

Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works.....lb. .14½- —
ctns., 1-ton lots or less, works..lb. .14¾- —

use DRYMET®
(COWLES ANHYDROUS SODIUM METASILICATE)
It's whiter, cleaner, tints easier — more uniformly, dissolves fast.
1885—75th Anniversary—1960
Cowles CHEMICAL COMPANY
7018 Euclid Avenue, • Cleveland 3, Ohio

Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .35 • —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb. cns., c.l., frt. alld. E lb. .42 • —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.16 • —
bgs., l.c.l., same basis 100 lbs. 8.56 • 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 • —
bgs., l.c.l., works 100 lbs. 9.70 -13.13
dms., c.l., works 100 lbs. 9.45 • —
dms., l.c.l., works 100 lbs.10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 • —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 • —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium - formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 • —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 • —
fib. dms., smaller lots, same basis lb. .30 • —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 • .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360° F. b.r., 14°-16° C. m.a.p., tankcars, New Jersey and New York gal. .29 • —
Houston, Texas gal. .29 • —
355°-420° F. b.r., 17°-18° C. m.a.p., tankcars, New Jersey and New York, gal. .30 • —
Houston, Texas gal. .30 • —
Solvent naphtha, petroleum, partial aromatic, 211°-265° F. b.r., 31° C. m.a.p., tankcars, New Jersey and New York gal. .235 • —
286°-340° F. b.r., 22° C. m.a.p., tankcars, New Jersey and New York gal. .275 • —
319°-380° F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 • —
322°-395° F. b.r., 28° C. m.a.p., tankcars, New Jersey and New York gal. .28 • —
Sorbit. powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., coml., aqueous, dms., c.l., works lb. .26 • —
dms., l.c.l., works lb. .27 • —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .33½- —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .34 • —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 • —
fib. dms., smaller lots, works lb. .39 • .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 • —
dms., l.c.l., works lb. .19 • —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 • —
dms., 1 to 5-ton lots, works. lb. .25 • .26
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 • —
bgs., l.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 • —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.53.00 • —
Soybean oil, crude, tanks, Decatur. lb. .09⅜- —
Foots, soapstock, acid 95%, tanks, N. Y. lb. .05¼- —
Refd., alkali, dms. lb. .1368- .1400
tanks lb. .1168- —
Clarified, dms. lb. .1318- .1350
tanks lb. .1118- —
Salid, dms. lb. .13⅜- .13⅝
tanks lb. .11⅜- .11½
Soybean oil acids, dbl. dist., dms., lb. .17 • .19½
tanks lb. .14½- —
S. D., dms. lb. .15¾- .18¼
tanks lb. .13¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 • —
Spearmint leaves, dom., bls. lb. .75 • —
Spearmint oil, NF, dms. lb. 8.00 • 9.50
Sperm oil, bleached, winter, 45°, dms. lb. .1575- .1675
tanks lb. .1375- —
Nat., winter, 45°, dms lb. .1475- .1575
tanks lb. .1275- —
Spermaceti wax, blocks, cs. lb. .31 • .33
Cakes, cs. lb. .32 • .34
Spruce oil, cns., dms. lb. 2.10 • 3.55
Squill, white, bls. lb. .16 • .18
Powd., bbls., bxs. lb. .17 • .20
St. John's bread, edible, bls. lb. .17 • —
Stannic chloride, anhyd., dms., works lb. .812 • .834
Stannic oxide, dms., dlvd. lb. 1.10 • 1.11
Stannous chloride, annyd. dms., works lb. 1.007 • 1.262
Hydrous, cryst., dms., works lb. .87 • .88
Stannous sulfate, dms., works lb. 1.062 • 1.102
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 • .61
Stearic acid, dbl., pressed bgs lb. .15¾- .18¼
Single-pressed, bgs., lb. .15¼- .17⅞
Triple-pressed, bgs. lb. .17½- .20
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 • —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .13 • —
Streptomycin sulfate, bulk, gram. .035 • .036
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 • —
Strontium carbonate, pure, dms., 5-ton lots or more, works. lb. .35 • —
dms., 1-ton lots, works lb. .37 • —
Tech., dms., works lb. .19 • —
Strontium chromate, fib. dms., dlvd. lb. .48 • —
Strontium iodide, jars, 25-lb. lots lb. 3.57 • —
Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 • —
bgs., l.c.l., works 100 lbs.12.00 • —
Strontium salicylate, NF, dms lb. 1.88 • —
Strontium sulfate, air floated, 90%, 325 mesh. bgs., works. ton.56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 • 3.75
Styrax gum, USP, cs. lb. 4.50 • 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l. lb. .1501- —
dms., l.c.l., same basis lb. .1701- —
tanks, bulk, same basis lb. .1251- —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.
Styrolyl acetate, bots. lb. 1.10 • —
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 • —
dms., l.t.l., same basis lb. .63 • .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 • —
dms., l.c.l., same basis lb. .52 • —
Sucrose, refd., white, bgs., refy E. lb. .0970- —
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 • —
tanks, same basis lb. .31 • —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 • —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 • —
Sugar (see Sucrose)
Sugar cane, wax, dom., refd., slabs, 80-lb. ctns., works lb. .60 • .65
80-lb. ctns., spot lb. .65 • .75
Sulfabenzamide, dms. kilo. 8.80 • 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 -10.10
Sulfacetamide, USP, fib. dms kilo. 6.61 • 6.83
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 • 9.25
Sulfadiazine, USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms. kilo.22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo.24.80 -25.90
Sulfaguanidine, NF X, dms kilo. 5.50 • 6.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.19.65 -20.75
USP XV, powd., dms. kilo.18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 • —
dms., l.c.l., t.l., works 100 lbs.17.50 18.50
Gran., dms., c.l., t.l., works. 100 lbs.14.75 • —
dms., l.c.l., t.l., works 100 lbs.16.25 -17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald lb. 1.50 • —
NF, fib. dm., frt. equald lb. 1.55 • —
Sulfanilamide quinoxaline, veterinary, dms kilo.16.28 • —
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 • —
dms., l.c.l., frt. alld lb. .23 • —
Sulfapyridine, USP XV, powd., bots., tins kilo.15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo.16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 • 6.90
NF X, powd., dms. kilo. 5.50 • 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 • —
Sulfur, coml., flour, bgs., mines. 100 lbs. 2.35 • —
bbls., mines 100 lbs. 3.30 • —
lump, bgs., mines 100 lbs. 2.25 • —
bbls., mines 100 lbs. 2.80 • —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton.23.50 • —
export, f.o.b. vessels, Gulf ports. long-ton.25.00 • —
US and Canada, f.o.b. vessels Gulf ports long-ton.25.00 • —
Domestic dark sulfur prices are $1 per long-ton lower.
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton.24.00 • —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 • —
bbls., mines 100 lbs. 7.00 • —
flour, light, bgs., mines 100 lbs. 5.25 • —
bbls., mines 100 lbs. 6.25 • —
lump, bgs., mines 100 lbs. 4.95 • —
rolls, bgs., mines 100 lbs. 5.50 • —
bbls., mines 100 lbs. 6.25 • —
salt block, bgs., mines 100 lbs. 4.65 • —
virgin block, bbls., mines 100 lbs. 4.70 • —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.45 • —
bbls., mines 100 lbs. 3.70 • —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.55 • —
bbls., mines 100 lbs. 3.80 • —
refd., bgs., mines 100 lbs. 4.90 • —
bbls., mines 100 lbs. 6.05 • —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 • —
bbls., mines 100 lbs. 4.00 • —

OIL, PAINT AND DRUG REPORTER

February 23, 1961

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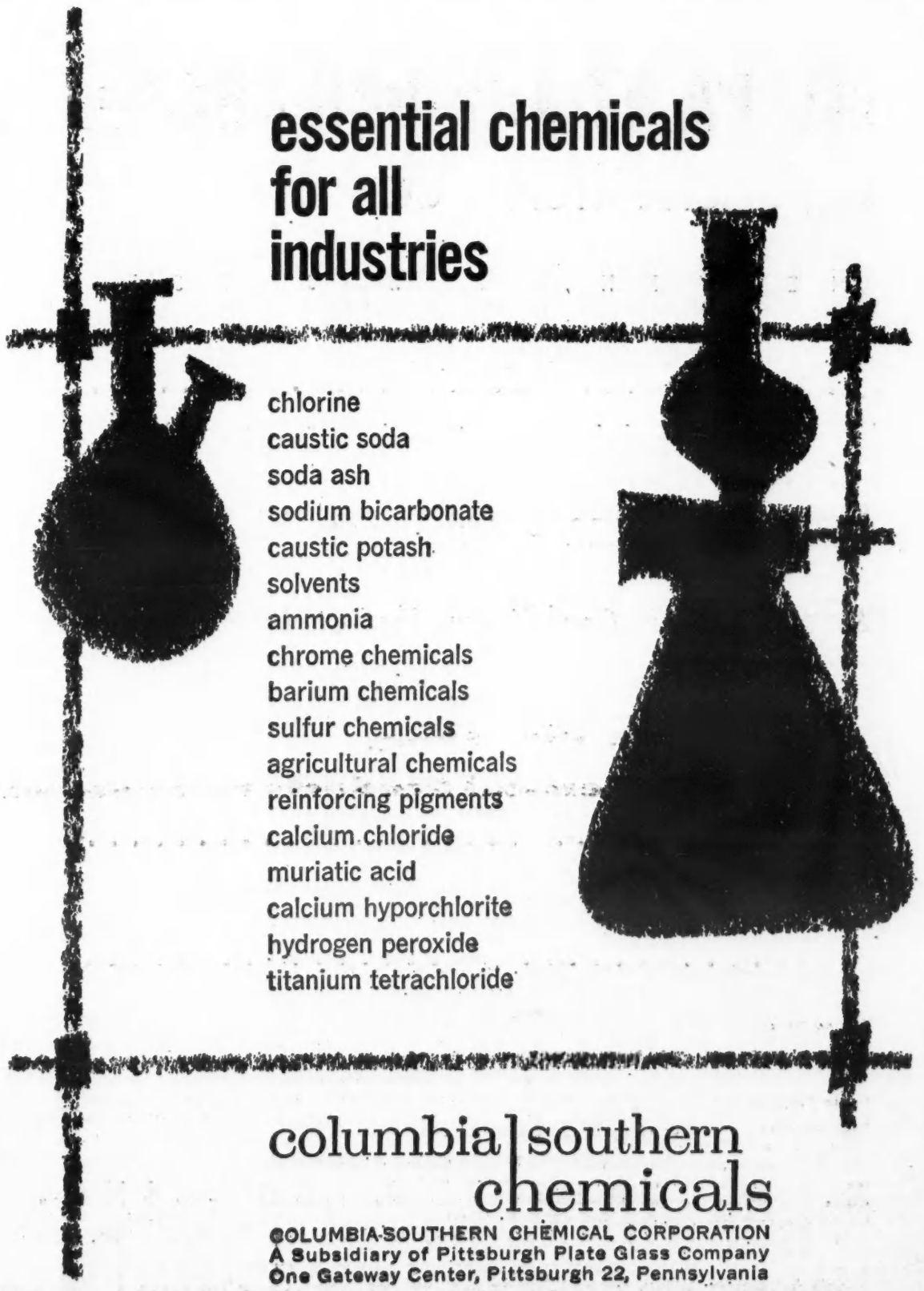
Sulfur dichloride, ret. dms., c.l., works, frt. equald..lb. .05¼- —
ret. dms., l.c.l., same basis....lb. .06¼- —
tanks, same basis .....lb. .04½- —
Sulfur dioxide, liq., coml., cyls., works, frt. equald..lb. .10 - .12
multi-unit cars, works....lb. .0535- —
tanks, works .....lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd..lb. .33 • —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald..lb. .05¼- —
dms., l.c.l., same basis .....lb. .06¼- —
tanks, same basis .....lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 • —
cbys., l.c.l., works .....100 lbs. 2.30 • —
tanks, works .....ton.18.60 • —
66° Be, cbys., c.l., works..100 lbs. 2.25 • —
cbys., l.c.l., works .....100 lbs. 2.55 - 3.35
tanks, works .....ton.22.35 • —
98%, tanks, works .....ton.23.50 • —
99%, tanks, works .....ton.23.70 • —
100%, tanks, works .....ton.23.95 • —
CP, NF, consumers' cbys., c.l., frt. equald..lb. .12¾- —
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis, lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld..lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis..lb. .17¾- .18¼
Sulfuric acid, fuming (oleum), 20%, tanks, works ..ton.25.00 • —
40%, tanks, works .....ton.29.00 • —
65%, tanks works .....ton.39.50 • —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 • .93
bulk, c.l., Carteret, N. J. unit-ton. .90 • .93
bulk, f.o.b. vessel at Fla. unit-ton. 1.03 • —
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 • —
Sweet birch oil, USP, northern, cns..lb. 4.00 - 9.50
USP, southern, cns .....lb. 2.00 - 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 • —
dms., l.c.l., same basis.....lb. 1.25 • —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald..lb. 1.24 • —
dms., l.c.l., works.....lb. 1.29 • —
Talc, dom., fibrous, grd., bgs., c.l., works, New York..ton.28.00 • —
bgs., l.c.l., works.....ton.31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York..ton.31.00 • —
bgs., l.c.l., works.....ton.34.00 • —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l. works..ton.38.00 • —
625 mesh, micronized, bgs., c.l., works..ton.80.00 • —
ord., Calif., grd., bgs., c.l., works..ton.34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works..ton.19.40 • —
bgs., l.c.l., works.....ton.37.00 • —
Imp., Canadian, grd., bgs., c.l., mines..ton.20.00 -35.00
Tall oil, crude, dms., c.l., works..lb. .04¼- .04½
tanks, works .....lb. .02⅞- .03
Dist., depending on grade, dms., c.l., works..lb. .06¼- .07¼
dms., l.c.l., works .....lb. .07 - .08
tanks, works .....lb. .04½- .05¼
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¼- .09
dms., l.c.l., works.....lb. .07½- .09½
tanks, works .....lb. .05¼- .06¼
Tall oil acids, dms., c.l., works..lb. .07 - .10
dms., l.c.l. .....lb. .07½- .10½
tanks, works .....lb. .05 - .08
Tallow, edible, tanks, dlvd. ...4b. .09¾- .09⅞
Inedible, fancy, bleachable, tanks, lb. .05¾- —
fancy, guaranteed, bulk, f.o.b. steamer..lb. .06½ Nom.
dms., f.a.s. .....lb. .07⅝ Nom.
tanks, dlvd. .....lb. .06 - .06½
No. 1, tanks, dlvd. .....lb. .04⅞- .05
Prime, tanks, dlvd. .....lb. .05¾- —
Special tanks, dlvd. .....lb. .05½- —
Sulfonated, 25%, bbls., l.c.l..lb. .08½- .08¾
50%, bbls., l.c.l. .....lb. .10½- .11
Tallow acids, dist., dms. .....lb. .13¼- .15¼
tanks .....lb. .10¾- —
Hydrogenated, dms. .....lb. .14¼- .17¼
Tallow oil, acidless, dms., c.l. ..lb. .13½- —
dms., l.c.l. .....lb. .14½- .15½
Tangerine oil, Florida, dms.....lb. 4.75 • —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.75 - 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots..lb. 2.05 • —
bbls., smaller lots.....lb. 2.06 - 2.07
NF, powd., bbls., 1,000-lb. lots..lb. 1.95 • —
bbls., smaller lots.....lb. 1.98 - 1.99
Tech., dms. .....lb. 1.05 • —
Tansy oil, dms.....lb. 6.60 - 8.00
Tar acid oil, 15-18%, dms., c.l., frt. equald..gal. .53½- —
dms., l.c.l., same basis.....gal. .55½- —
tanks, same basis.....gal. .43½- —
Tar acid oil, 25-28%, dms., c.l., same basis..gal. .60 • —
dms., l.c.l., same basis.....gal. .62 • —
tanks, same basis.....gal. .50 • —
50-53%, dms., c.l., same basis..gal. .75 • —
dms., l.c.l., same basis.....gal. .77 • —
tanks, same basis.....gal. .65 • —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald..lb. .41 • —
bgs., 10,000 lbs., 1 shipt., same basis..lb. .43 • X
bgs., smaller lots, same basis lb. .47 • X
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms..lb. .70 • —
Terpineol, extra, dms.....lb. .50 • .60
Prime, dms. .....lb. .40 • .50
Terpinyl acetate, extra, cns., dms. lb. .64 • .75
Prime, dms. .....lb. .53 • .56
Terpinyl propionate, dms. .....lb. 1.70 • —
Terra alba (see Gypsum).
Testosterone, USP, bots. ....gram. No prices.
Testosterone propionate, USP, bots. gram. No prices.
Tetrachloroethane, dms., works..lb. .14½- .15
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works..lb. .20¼- —
dms., l.c.l., works.....lb. .22 • .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E..lb. .60 • X
dms., l.c.l., dlvd. E.....lb. .61½- X
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald..lb. .75 • —
Tetraethylenepentamine, dms., c.l., dlvd. E..lb. .53½- X
dms., l.c.l., dlvd. E.....lb. .55 • X
tanks, dlvd. E.....lb. .51 • X
Tetraethylthiuram disulfide, tech., dms., frt. alld..lb. 1.04 • —
Tetrahydrofuran, dms., c.l., t.l., works..lb. .56¼- —
dms., l.c.l., or l.t.l., works.....lb. .57 • —
tanks, works .....lb. .55 • —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., l.c.l., Memphis, Tenn..lb. .32¼- —
dms., c.l., t.l., Newark, N.J..lb. .33½- —
dms., l.c.l., Newark, N.J.....lb. .34½- —
tanks, dlvd. E. of Denver.....lb. .31 • —
tanks, dlvd. W. of Denver.....lb. .32 • —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E..lb. .39 • —
l.c.l., l.t.l., same basis.....lb. .41 • —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd.....lb. 7.50 -10.00
Thallium sulfate, 99%, bots., dlvd. lb. 5.00 -10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works..lb. 4.40 - 5.50
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works..lb. 6.45 • —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb. 3.80 • —
Theophyline, USP, anhyd., 100-lb. dms., frt. alld..lb. 3.65 • —
Thiamine hydrochloride, USP, fib. dms., frt. alld..kilo.36.00 • —
USP, ampule grade, fib., dms., frt. alld..kilo.38.00 • —
Thiamine mononitrate, USP, fib. dms., frt. alld..kilo.36.00 • —
Thiocarbanilide, dms., ton lots..lb. .72 • —
dms., less ton lots.....lb. .74 • —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works..lb. 5.10 • —
Tungstated, PTMA, kgs., works.lb. 6.20 • —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis..lb. 1.15 • —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works..lb. 4.00 • —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 • X
bgs., ton lots, same basis....lb. .33 • X
bgs., less than ton lots, same basis..lb. .33 • —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works..lb. 3.50 • X
dl-Threonine, bots., 1-kilo lots..kilo.275.00 • X
Thyme leaves, French, triple sifted extra, bgs..lb. .28 • —
Spanish, extra, bgs.....lb. .11 • —
triple sifted, bgs. .....lb. .25 • —
Spanish, bgs. .....lb. .09 • —
Thyme oil, NF, red, cns., dms....lb. 1.90 - 2.25
NF, white, cns. .....lb. 2.20 - 2.60
Tech., white, cns. .....lb. .40 - 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works..lb. 3.06 • —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works..lb. 7.40 • —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) .....lb. 1.02 • —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd..lb. .25½- —
bgs., l.c.l., dlvd. .....lb. .26½- —
reg., bgs., c.l., dlvd. .....lb. .25½- —
bgs., l.c.l., dlvd. .....lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla.ton.180.00 • —
bgs., 5-ton lots, Niagara Falls, N. Y....ton.205.00 • —
bgs., ton lots, same basis. ton.215.00 • —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E..lb. .27½- —
bgs., l.c.l., dlvd. E.....lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd..lb. .09¾- —
bgs., l.c.l., works.....lb. .09⅞- —
50% Ti O_2, high-tinting, dms., c.l., lb. .14¾- —
dms., l.c.l. .....lb. .14⅞- —
Titanium hydride, powd., dms., works..lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works..lb. .26 • —
dms., l.c.l., works.....lb. .27½- .29
tanks, works .....lb. .20 • —
Tobias acid, dms., c.l., t.l. .....lb. .78 • —
dms., l.c.l. .....lb. .81 • —



d-a-Tocopherols—Victoria Blue Toner

d-a-Tocopherols, NF, mixer, conc., pure basis, bots. kilo. 67.00 • —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots. kilo. 122.00 • —
d-a-Tocopheryl acid succinate, cryst., bots. kilo. 109.00 • —
dl-a-Tocopherol, bots. kilo. 99.00 • —
dl-a-Tocopheryl acetate, bots kilo. 90.00 • —
25% dry, powd., bots. kilo. 22.50 -24.00
33⅓% dry, powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb. 1.55 • —
Paste, kgs., 100% basis lb. 1.50 • —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis lb. 1.50 • —
Tolu balsam, cns. lb. 3.50 • 3.65
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25 • —
Toluene, petroleum, indust., tanks, dlvd. E. of Rockies gal. .25 • —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 • —
dms., l.t.l., same basis lb. .63 • —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld. lb. .16 • —
1,000-lb. or more, same basis lb. .18 • —
less than 1,000-lb., same basis lb. .23 • —
tanks, same basis lb. .14 • —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.

p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l. lb. .90 • —
dms., 125 lbs. to t.l. lb. 1.00 • —
m-Toluidine, dms., c.l., works, frt. alld. lb. .83 • —
dms., l.c.l., same basis lb. .84 • —
tanks, same basis lb. .82 • —
o-Toluidine, dms., c.l., works, frt. alld. lb. .30 • —
dms., l.c.l., same basis lb. .31 • —
tanks, same basis lb. .28 • —
p-Toluidine, tech., flake, dms., frt. alld. lb. .50 • —
Cast, dms., frt. alld. lb. .45 • —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 • 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 • —
Light shades, kgs, works lb. 1.70 • —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld. lb. 1.10 • —
Tonka beans, Angostura, cks. lb. 1.50 • —
Brazillan, Surinam, cs. lb. 1.30 • —
Totaquine, 100-oz. lots, cns. oz. .42 • —
Toxaphene, dms., c.l., t.l., works. lb. .22 • —
dms., l.c.l., l.t.l., works lb. .28 • —
Tragacanth gum, No. 1, ribbons, cs. lb. 4.10 • 4.20
No. 2, cs. lb. 3.75 • 3.80
No. 3, cs. lb. 3.40 • 3.65
USP, powd., bbls. lb. 1.05 • 1.15
Triacetin dms., c.l., dlvd. E. of Rockies lb. .39 • —
dms., l.c.l., same basis lb. .40 • —
tanks, same basis lb. .37 • —

Triallylamine, dms., c.l., dlvd. lb. .985 • —
dms., l.c.l., dlvd. lb. .995 • —
tanks, dlvd. lb. .96 • —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver. lb. .42½ • —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½ • —
tanks, frt. alld. E. of Denver lb. .40 • —
Tributyl phosphate, dms., c.l., works. lb. .52½ • —
dms, l.c.l., same basis lb. .53½ • —
tanks, same basis lb. .50 • —
Tributylamine dms., c.l., works lb. .67½ • —
dms., l.c.l., same basis lb. .69 • —
tanks, same basis lb. .65 • —
Tributyrin, dms., l.c.l., dlvd. lb. .69 • —
Trichloroacetic acid, 300 lb. dms., c.l. lb. .52 • —
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .15 • —
dms., l.c.l., frt. alld. E. lb. .16 • —
tanks, frt. alld. E. lb. .13¼ • —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼ • —
dms, l.c.l., dlvd. lb. .16¼ • —
tanks, dlvd. lb. .12¼ • —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½ • —
dms., l.c.l., dlvd. E. lb. .14¼ • —
tanks, works lb. .11½ • —
Trichloroethylene, dms., c.l., or t.l., dlvd. lb. .14 • —
dms., l.c.l., dlvd. lb. .15¼ • —
tanks, dlvd. lb. .12¾ • —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald. lb. .65 • —
dms., l.c.l., same basis lb. .75 • —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted. lb. 1.40 • 1.45

Tricresyl phosphate, coaltar, dms., c.l., dlvd. lb. .33 • —
dms., l.c.l., dlvd. lb. .36 • —
tanks, dlvd. lb. .32½ • —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½ • —
dms., l.c.l., dlvd. lb. .35½ • —
tanks, dlvd. lb. .32½ • —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E. lb. .26½ • —
dms., l.c.l., dlvd. E. lb. .28 • —
tanks, dlvd. B. lb. .24 • —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½ • —
dms., l.c.l., same basis lb. .26 • —
tanks, same basis lb. .22 • —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld. lb. .25½ • —
dms., l.t.l., frt. alld. lb. .26½ • —
tanks, frt. alld. lb. .24½ • —
Triethylamine, dms., c.l., dlvd. E. lb. .50 • —
dms., l.c.l., same basis lb. .51½ • —
tanks, same basis lb. .47½ • —
Triethyl nitrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .46¼ • —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .47¼ • —
tanks, frt. alld. E. of Denver. lb. .43¾ • —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½ • —
dms., l.c.l., dlvd. lb. .42 • —
tanks, dlvd. lb. .38 • —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 • —
dms., l.c.l., dlvd. E lb. .22¼ • —
tanks, same basis lb. .18½ • —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½ • —
dms., l.c.l., dlvd. E lb. .53 • —
tanks, dlvd. E lb. .49 • —
Triisobutylene, tanks, dlvd. lb. .08 • —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼ • —
dms., l.c.l., dlvd. E lb. .24¾ • —
tanks, dlvd. E lb. .20¾ • —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 • .305
tanks, frt. equald, 100% basis. lb. .26 • —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 • —
dms., l.c.l., frt. equald, 100% basis lb. .35½ • —
tanks, 100% basis, frt. equald lb. .26 • —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 • —
dms., l.c.l., l.t.l., same basis lb. .36 • —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 • —
dms., l.c.l., works lb. .51½ • —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 • —
bgs., l.c.l., l.t.l., dlvd. E lb. .41 • —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½ • —
bbls., l.c.l., frt. equald lb. .43½ • —
Triphenylguanidine, bbls., works lb. .90 • —
Tripropylene, dms., c.l., dlvd. E gal. .44 • —
dms., l.c.l., same basis gal. .54 • —
tanks, same basis gal. .28 • —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½ • —
dms., l.c.l., l.t.l., frt. alld. E lb. .22 • —
tankcars and compartmented tankcars, frt. alld. E lb. .17½ • —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E lb. .18 • —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works lb. 55.00 • —
Tung oil, dms., New York lb. .24½ • .25
tanks, imported, N. Y. lb. .23 • —
tanks, domestic, mills lb. .22⅝ • —
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 • —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls., works lb. .62 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 • .50
Tuscan red, bbls., frt. equald lb. .26 • .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 • .39¼
Jobbing types, bbls., same basis lb. .19 • —
Regular types, dry bbls., same basis lb. .22½ • .35
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½ • .07¾
bgs., l.c.l., works lb. .07¾ • .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼ • —
Raw, American, bgs., works lb. .07¾ • .08¼
Turkey-type, bgs., works lb. .08¼ • .08¾
Undecylenic acid, dms. lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton. 125.00 • —
bgs., l.c.l., dlvd. E. ex whse. ton. 145.00 • —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton. 103.00 • —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 • —
37 grade, tanks, same basis ton. 145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 • —
dms., l.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls lb. .12 • —

V

Valerian root, Belgian bgs. lb. .32 • —
Indian, bgs. lb. .25 • —
dl-Valine, dms., works lb. 21.00 -27.50
Vanadium pentoxide, tech., dms., works lb. 1.38 • —
Vandyke brown, bbls., works lb. .09½ • .12
Vanilla beans, Bourbon, tins lb. 10.75 • —
Mexican cuts, tins lb. 11.00 • —
whole, tins lb. 12.00 • —
Vanillin ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more lb. 3.00 • —
100-lb. fib. dms., 500-lb. lots lb. 3.10 • —
100-lb. fib. dms., cns. 100-lb. lots lb. 3.25 • 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 • —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns. lb. 17.25 -17.50
Haitian, cns. lb. 14.50 -15.50
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 • 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 • —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.

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Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

Triphenyl Phosphate

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Vinyl acetate monomer, zone 1, 85-gal. dms., c.l., dlvd. lb. .20 • —
85-gal. dms., l.c.l., dlvd. ....lb. .21½- —
tanks, dlvd. ....lb. .17½- —
tanktrucks less than 4,000 gal., dlvd. lb. .18 • —
Zone 2, 55-gal. dms., c.l., dlvd. lb. .21 • —
55-gal. dms., l.c.l., dlvd. ....lb. .24 • —
tanks, dlvd. ....lb. .18½- —
Vinyl acetate monomer, zone 2, tanktrucks, less than 4,000 gals. dlvd. lb. .19 • —

Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.

Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 • —
Vinyl chloride monomer, tanks, works lb. .125 • —
Vinyl ether USP, anethesia, bots., 50cc., hospitals bot. 1.12 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether tech. dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 • —
tanks, works lb. .27¼- —
Vinyl propionate monomer, dms., c.l., dlvd. lb. .49 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works lb. 1.35 • —
tanks, works lb. 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., works, lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 • —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 • —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 • —
325,000 units per gram, same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33.75 • —

Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.

Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09¼- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.95.00 • —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms. gram. 1.14 • —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms. gram. 1.14 • —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.85.00 • —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.109.00 • —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo, dms., frt. alld. gram. .90 • —
0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld gram. .90 • —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 • —
850,000 units per gram less than kilo lots kilo.45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. ....lb. 2.00 - 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 • —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 • —
Watchung-type reds., bbls lb. 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 • —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 • .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb. 5.50 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .22 • —
Thin, rossed, bls. lb. .22 Nom.
Wintergreen oil, USP nat. northern, cns lb. 6.35 -17.50
USP, nat. southern cns lb. 3.75 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .16 • .17
Witch hazel leaves, bls. lb. .25 • —
Wollastonite fine bgs., c.l., works, ton.39.50 • —
bgs., l.c.l. ex whse ton.56.00 • —
Medium, bgs., c.l., works ton.27.00 • —
bgs., l.c.l. ex whse. ton.44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs. lb. 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 - 5.00

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 • —
Birmingham dist. gal. .29 • —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 • —
Geneva, Utah gal. .29 • —
Johnstown, Pa. gal. .29 • —
Lackawanna, N. Y gal. .29½- —
Xylene, coaltar, indust., tanks, works:
Lone Star, Tex. gal. .27 • —
Lorain, Ohio gal. .29 • —
Middletown, Ohio gal. .30 • —
Minnequa, Col. gal. .29 • —
Philadelphia dist. gal. .29 • —
Pittsburgh dist. gal. .29 • —
Sparrows Point, Md. gal. .29 • —
Terre Haute, Ind. gal .29 • —
Youngstown, Ohio gal. .29 • —

Xylene, petroleum, indust., tanks f.o.b. works:
Bayonne, N. J gal. .29 • —
Baytown, Tex. gal. .27 • —
Charleston, S. C. gal. .29 • —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .30
Houston, Tex. gal. .27 • —
Philadelphia, Pa. gal. .29 • —
Providence, R. I. gal. .30 • —
Sewell's Point, Va. gal. .28 • —
Wood River, Ill. gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif. lb. .25 • —
dms., l.c.l., f.o.b., Richmond, Calif. lb. .26 • —
tanks, frt. alld. lb. .23 • —
o-Xylene, dms., c.l., works lb. .08 • —
dms., l.c.l., works lb. .09 • —
tanks, works lb. .06 • .06½
p-Xylene, dms., c.l., works lb. .20 • —
dms., l.c.l., works lb. .21 • —
tanks, frt. alld. lb. .1645- —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works lb. .23 • —
56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .33 • —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis. lb. .40 • —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 • —
dms., l.c.l., same basis gal. 1.30 • —
tanks, same basis gal. 1.05 • —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis. gal. 1.35 • —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal. 1.40 • —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 • —
2,5-Xyliline, tech., dms., frt. alld. lb. 1.20 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 • —
dms., l.c.l., same basis lb. .40 • —
tanks, same basis lb. .33 • —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd lb. .27 • —
primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms. lb. .47 • —
USP XV, 270 mcg., B_1 per gram, 100-lb. dms. lb. .52 • —
USP XV, 300 mcg., B_1 per gram, 100-lb. dms. lb. .56 • —
USP XV, 900 mcg., B_1 per gram, 100-lb. dms. lb. .60 • —
Torula, USP, dlvd. lb. .18 • —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. lb. .40 - .45
Ylang-ylang oil, Bourbon, bots. lb. 7.00 -22.00
extra, bots. lb.24.00 -33.00
extra, bots. lb.24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd. lb. .343 • —
bgs., smaller lots, dlvd. lb. .373 • —
Zinc acetate, NF, VIII, dms. lb. .53 • —
Tech., dms., l.t.l., works lb. .29¼- —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 • —
bgs., less than 1,000 lbs., same basis lb. .27 • —
Zinc chloride, NF, gran., dms. lb. .42 • —
NF, precip., powd., dms. lb. .26 • —
Tech., soln., 50%, dms., c.l., works 100 lbs. 5.80 • —
dms., l.c.l., works 100 lbs. 6.40 • —
tanks, works 100 lbs. 5.15 • —
fused, dms., c.l., works 100 lbs.10.70 • —
dms., l.c.l., works 100lbs.11.20 • —
gran., fib. dms., c.l., works. 100 lbs.11.45 • —
fib. dms., l.c.l., works. 100 lbs.11.95 • —
Zinc chromate bbls., dlvd. lb. .29 • —
Basic bbls., dlvd. lb. .34 • —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 • —
dms., smaller lots, works lb. .57 • —

—Continued on page 63

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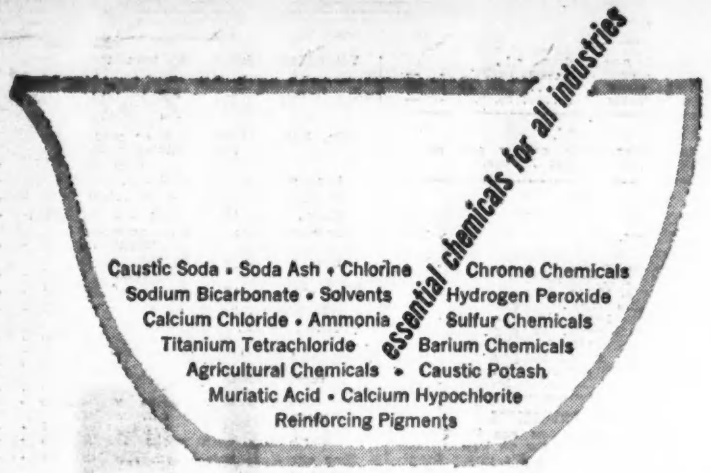

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Heavy Chemicals

The beginning of the end of vacation shutdown time is reflected in a brace of optimistic reports from the chemical trade. The petroleum industry is said to have stepped up its requirements, as have aluminum makers, and chemical processing plants are back in business. The paper and glass industries, which stood as strong points in the market all summer, look even stronger today, these trade sources report. Notable among the markets' weak points, however, are steel and nonferrous metals, and the prospect of an early upturn in those areas is not bright.

There were conflicting reports last week on the seriousness of the copper sulfate supply situation. Some observers pictured the market as being on the snug side of balance, others saw a supply squeeze that could in time trigger a price advance.

Elsewhere in the chemical business, price levels wore a steady look. Alum continued steady throughout the country except in the northeast where a prevailing discount, in response to a competitive situation, still prevailed. Discounts in sulfur were as previously. Northeast shading of sulfuric acid, a related situation that has obtained for about a year, continued in evidence, and it appeared to observers that by not deteriorating during this period of lagging steel production, the situation has proved itself stabilized.

For the first quarter the year, building products led the way as the major aluminum-consuming field, according to a report from the Aluminum Association. That segment of the market accounted for 18.6 percent of aluminum shipments. The transportation field (including mobile homes) ran a close second with 18 percent of total shipments by members of the Association. Consumer durable goods were in third place, with 12.6 percent of shipments, the Association reported.

The American Paper and Pulp Association reported production for the week ended August 20, at 92.7 percent of theoretical capacity, as compared with the revised figure of 91.2 percent for the previous week and 96.7 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
106. 81	106.81	106.86	107.13

For Current Prices see Page 10

Acids

Hydorchloric—Chemical makers, back in the saddle now that vactions are mostly over, are digging their spurs into the hydrochloric market. If in spite of this the market won't give with much more than a trot, it's because steel remains moribund and the rest of the metals trade has yet to recover from languor of summer.

Hydrofluoric—The HF balance sheet shows mostly plus marks. The petroleum industry has stepped up its requirements; aluminum makers remain as busy as ever, and the chemical trade, led by producers of fluorinated hydrocarbons, is back in business. Trade sources agree that HF has weathered a generally poor summer much better than any other major acid.

Nitric—Renewed interest manifested by chemical accounts at this season fall far short of making up the deficit incurred by nearly defunct fertilizer manufacture and lagging steel output, sources in the trade say.

Phosphoric—Producers are preparing for what is expected to be a brisk fertilizer season. The phosphate end of the plant food business is believed in many quarters to have the most promising growth prospects.

Sulfuric—American Iron & Steel Institute estimates steel output during the week just ended at 1,552,000 net tons, or 54.5 percent of capacity, which, if correct, represents a slight decrease over the previous week's actual total of 1,558,000 tons, or 54.7 percent of capacity.

For perspective, the Institute cites production a month ago at 1,520,000 net tons, and a year ago, when the marathon strike was in progress, at only 332,000 tons.

Bases and Salts

Aluminum Sulfate—Price patterns remain unchanged: Competitively shaded in the northern New Jersey area where a new producer is vieing with established makers, and steady elsewhere in the country.

The paper industry, currently operating at about 90 percent of capacity, continues to underpin the market. Other outlets, spurred by the end of plant shutdowns, are starting to get off the ground, trade sources report.

Caustic Soda—Sales to the paper trade remain brisk, textile accounts are picking up, and the soap makers are starting to place orders for early September shipment. All told, the market is in fair shape, recovered from summer doldrums and preparing to get its hooks into that booming fourth quarter.

Calcium Chloride—A comparatively mild summer refused to kick its heels very high, therefore raised less dust than usual, and calcium chloride sales suffered accordingly, sources in the trade report.

Chlorine—Prices are steady at the higher levels that went into effect with the start of the second quarter. Producers were able to post that advance, which some say was long overdue considering the upward thrust of costs, because the material had pulled sharply ahead of its coproduct and rival, caustic soda, in business volume this year. Caustic prices were not raised.

Soda Ash—This big volume chemical has been long unchanged in price. This is said to be a source of acute but unavoidable discomfort to makers of the synthetic product because their costs of production have risen steadily with today's inflationary trend while those who sell the natural product have as it were been able to live off their own fat.

Nonferrous Metals

Aluminum—Consumption of purchased aluminum-base scrap totaled 44,157 tons in March, an increase of 3,000 tons, or 7 percent, over the February level, the Mines Bureau reports.

This carried first quarter consumption to a total of 128,000 tons, representing a gain of 17,000 tons or 15.5 percent over the corresponding quarter of last year.

Receipts of new scrap in March showed an increase of 3,548 tons as compared with February, the Bureau notes.

In a report from Business & Defense Servics Administration, crude aluminum exports in June were tallied at 49.1 million pounds, up from 31.9 million in May. The total for the first six months of the year was 323.2 million pounds, as against only 69.1 million pounds in the same period of 1959.

Scrap exports in June, BDSA notes, were 13.2 million pounds, about unchanged from May. The half-year total was 79.9 million pounds, up briskly from 22.8 million a year earlier.

The Mines Bureau reports production of secondary aluminum ingot by independent smelters in April at 24,018 tons, down 18 percent from March. Shipments during the month experienced a decline of 18.5 percent, the Bureau notes.

Secondary smelters used 29,884 tons of purchased aluminum-base scrap during the month, or 79 percent of the 37,973 tons consumed. Primary producers used 5,411 tons, or 14 percent; and foundries, fabricators and others took 2,678 tons, or 7 percent. The calculated metallic recovery amounted to 30,826 tons: 24,794 tons from new scrap, and 6,032 from old.

The Bureau estimates that full coverage of the industry would yield a total scrap consumption of 44,000 tons and secondary ingot output of 28,000 tons. Metallic recovery on that basis would total 36,000 tons.

Bauxite—World production of bauxite increased 8 percent in 1959, the Mines Burau reports.

US output was up 30 percent and consumption rose 23 percent. While Jamaica continued as the world's leading pro-

ducer, output was begun on large scale in the nearby Dominican Republic.

In the US, about 4.1 million short tons of alumina and aluminum oxide products was produced from bauxite. Production of aluminum accounted for 87 percent of bauxite usage, the Bureau points out.

Almost one million tons of new annual alumina capacity was brought into production at three US plants, thereby increasing the domestic capacity by 25 percent. Except for 275,000 tons of capacity planned at Points Comfort, Tex., the scheduled alumina-plant expansion in the US was completed entirely, Mines notes.

Production of crude bauxite in the US was 1.7 million long tons, dry equivalent, a 30 percent increase over the 1958 level. On a dry basis, shipments of ore from domestic mines and processing plants to consumers increased 17 percent over 1958. The domestic output was 17 percent of the new supply compared with 14 percent in 1958.

Copper—Output of the metal was at a record level of 167,000 tons in April, Business & Defense Services Administration reports. This culminated the gradual restoration of refined production following the long strike.

Exports moved up similarly. BDSA reports them at 52,000 tons for the first quarter. The April figure was 31,000 tons, but in May they soared to 51,000 tons, nearly equalling the entire first quarter.

Complete data for early 1960 appear in the Spring-Summer copper industry report, available from the superintendent of documents at the US government printing office in Washington, D. C. Individual copies may be obtained at 15c. each from the Department of Commerce.

From Bureau of Mines comes a report that output of recoverable copper at mines in the US in June totaled 95,600 tons, down 3 percent from May.

Consumption of refined copper, Mines reports, totaled 117,900 tons in June as against 112,900 tons a month earlier, the agency notes.

Tin—Straits metal closed at $1.02 a pound, spot, unchanged from a week earlier.

Consumption of primary tin in the US in May totaled 5,310 long tons, up 350 tons from April and the highest since January 1957, the Mines Bureau reports.

Total US tin stocks, the Bureau notes, were down to 36,025 tons by May 31, a decrease of 725 long tons from the month. Simultaneously, industrial stocks of tin continued to be pared, dropping 515 tons, from 22,445 at the beginning of the month to 21,930 at the end.

Average consumption for the first five months of the year in the US works out to 59,000 tons; a substantial increase over the 45,500 monthly average for 1959, and 48,000 tons a month for 1958. The pattern on a worldwide basis was similarly upward, the Bureau notes.

Zinc—Smelter output of slab zinc eased slightly in June, totaling 73,754 tons as compared with 76,723 in June, the American Zinc Institute reports.

Shipments were about unchanged at 54,381 tons as against 54,075 the previous month. On the domestic level, they totaled 50,002 tons, also about unchanged, the previous month's total being 50,690 tons.

Daily average production for the month was 2,379 tons. Stocks closed at 207,059, up substantially from 187,686 a month earlier.

Production breakdown by grade was as follows:

- Special high grade, 28,260 tons as compared with 29,023 in June.
- High grade, 4,630 tons, as compared with 7,041.
- Intermediate, 1,734 tons, as compared with 1,276.
- Prime western (including select and brass special), 39,130 tons, as compared with 39,383 tons.

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Natural Rubber Duplicate Ordered Up for Licensing

B. F. Goodrich Company, Akron, Ohio, has exclusive patent rights on "Ameripol SN," but must license all concerns wanting to produce this synthetic duplicate of natural rubber.

Under a consent decree entered in Federal District Court in Washington last week, Goodrich has agreed to compulsory licensing at a maximum royalty of 2½ percent of net sales.

In filing its suit against Goodrich in 1957, the Department of Justice charged that the process for making the special rubber was developed by the Akron company during 1949 to 1955 while a $1.7 million government contract was in effect.

According to the complaint, Goodrich in taking on the assignment promised to make available to the government all information on new processes which it might develop, whether developed with government or private funds.

The government also maintained that it was promised royalty-free rights to license such information and to make it available to others.

Goodrich based its defense on the argument that the synthetic rubber was developed with private money by Goodrich-Gulf Chemicals, Inc., which is jointly-owned by Goodrich and Gulf Oil Corporation, and was not tied in with government work.

Following the court decree, Goodrich indicated that it is prepared to enter into licensing agreements with US and Canadian manufacturers to produce "Ameripol SN."

Brush Beryllium Revamps Its Corporate Organization

Brush Beryllium Company, Cleveland, Ohio, reportedly the world's largest producer and fabricator of beryllium products, has been reorganized on a divisional basis to facilitate further growth.

The new divisions are: Elmore Division, which will produce beryllium metal ingot, powder and hot pressed blocks and beryllium compounds; fabricating division, to encompass all fabricating operations; Pennrold Division, which has been operating under that name since 1958, and a sales division.

OVERSEER OF PLANTS: Thomas R. Young, named operations vice-president by Houston Chemical Company. He will supervise construction of tetraethyl and tetramethyl lead plants at Beaumont, Tex., which will make Houston the third US producer of these gasoline additives.

Roden Named Agent

Paul Roden has been made exclusive sales agent for Taylor-Lowenstein & Co., a producer of naval stores at Mobile, Ala. He replaces Irving A. Levis, who died last May. Mr. Roden is located at 44 Whitehall street, New York.

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Sabin's Vaccine: New Target for Drug People

—*Continued from page 3*

decision realistically and intends to get into Sabin vaccine as soon as it can meet the government's requirements.

A company official is confident that no conversion problems will be involved in the switch-over and that the plant will be turning out considerable quantities of the approved vaccine in about nine months.

Mid-1961 the Date

Dr. Burney said he is doubtful whether "substantial supplies" of the live vaccine will be available before mid-1961. Licensing is not expected before spring.

PHS is now drawing up a set of requirements for the drug makers. The standards —to be issued this week—among other things will:

- Spell out the requirements for the live virus strains. This is to guard against a wild strain from being introduced accidentally into the seed virus.
- Detail housing, handling and conditioning requirements for the monkeys needed to produce the vaccine. For instance, only two monkeys will be permitted to a cage; the monkeys must be isolated; they must be quarantined for six weeks.
- Outline the necessary manufacturing steps. For example, the temperature of incubation will not be permitted to go above 35 degrees Centigrade. That's because attentuated strains grow best at this temperature and wild strains thrive above 35 degrees.
- Contain specific prohibitions on production areas. Live polio virus production facilities must be isolated from other manufacturing units.
- Detail test requirements.
- Map out the neurovirulence requirements for monkeys.
- Give the requirements for new live polio strains. Such a strain must show freedom from harmful effects after administration to 100,000 susceptible persons.

To be eligible for a license, a pharmaceutical manufacturer must produce five consecutively uniform lots of each type—fifteen lots in all.

The material must produce antibody conversions—80 percent or more when used once and 90 percent or more when employed two or more times.

Though there will be a lag between the initial issuance of the requirements this week and their final appearance in the *Federal Register* the latter part of this year (the time will be needed for rephrasing into legal phraseology and for industry comments), Dr. Burney gave drug makers this assurance:

No Serious Changes in Procedures

"No serious changes will be made in the technical procedures for manufacturing and testing."

The Surgeon General said manufacturers may begin production of three live virus vaccines, one covering each of the major strains. However, he indicated that it is strictly up to the drug houses whether they wish to produce three different vaccines or just one containing all three strains.

Should there be three, it will mean three different doses with a fourth dose containing all three as a booster. Should a manufacturer concentrate on one vaccine containing all three strains, it will mean a second dose to insure immunization, he pointed out.

The vaccine most probably will be made available in liquid or pill form. However, a candy form, which is the way it is now being given in the Soviet Union to every Russian under twenty-one years of age, is not outside the realm of possibility. A candy vaccine will be unsuitable for babies until they get their first teeth, as mastication is necessary for it to be effective.

The Form Is Up to Makers

The form of the live polio vaccine, Dr. Burney said, is a matter for the individual drug manufacturers to decide.

He went on to make it clear that "the live vaccine will not replace the Salk vaccine," adding that there is a need for both. "They will complement each other," he commented.

PHS will very likely insist that the live vaccine be administered on a community-wide, rather than individual, basis. This is because the polio viruses used, when passed naturally from person to person, can increase in virulence as they spread to non-vaccinated persons.

The health agency is of the opinion that three—and perhaps four—doses will be needed to insure immunity. The Sabin vaccine can also be used as a booster for the Salk vaccine where the community has been widely innoculated with a full series of the latter. If not, either the Salk or live vaccines can be administered.

PHS is hopeful that the ease of administering the live vaccine will help enormously in inducing the recalcitrant US public to become immunized to polio. What it boils down to, said Dr. Burney, "is one shot [for the Salk killed virus vaccine] against three gulps [for the Sabin oral live vaccine]."

Oxygen Looks Like a Winner

—*Continued from page 7*

32 billion cubic feet of equivalent gas was widely scattered throughout the country.

Five new industry-operated plants and several plant expansions are expected to bring industrial liquid oxygen production capacity to about 35 billion equivalent cubic feet of gas by January 1, 1962.

Regaling us with a little ancient history, BDSA recalls that air-fractionation and water-electrolysis plants, all producing high-purity oxygen, totaled 160 in 1933. In 1939, there were 185 such plants. Four years later there were 228.

As of January 1, 1957, 314 plants produced high-purity oxygen and on January 1, 1960, more than 320 plants, with a combined annual capacity of 69.2 billion cubic feet of oxygen, were selling oxygen at a purity of 99.5 percent, about 90 percent of which was made at 99.95 percent pure.

Currently, there are about 15 electrolytic plants, some of which are operated by air-fractionation producers. Their combined capacity is less than 1 percent of the country's total oxygen potential. Before 1900, electrolysis was the only method of industrial oxygen production, BDSA recalls.

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Aliphatic Organics

A major producer advanced corn syrup prices 15 cents per hundred pounds August 15, then reduced prices 15 cents per hundred pounds August 23. Its abrupt about-face—prompted, perhaps, by adverse consumer reaction—reestablished the schedule in effect since the last price change, July 30, 1956. In years since, operating costs and discrepancies in pricing structure have developed, the firm told its customers, but after explaining why the higher prices were warranted, it said that "the decision now has been made to absorb these added costs."

A 15 cent per pound price reduction posted for acrolein August 15 was not rescinded last week, however. In fact, there's an outside chance that a further cut will be made when a new producer starts up operations at its Norco, La., plant site sometime within the next few weeks.

Tire cord and tire fabric production during the second quarter of 1960 amounted to 116,926,000 pounds. This was an increase of less than one percent over output the previous quarter and the comparable period of 1959, the Census bureau says.

Production of rayon tire cord and tire fabric during the second three months of the year, at 64,692,000 pounds, was down 6 percent from the first quarter, while output of nylon tire cord, at 41,219,000 pounds, was up 14 percent.

Stocks of tire cord and tire cord fabric measured 49,488,000 pounds on July 2. This was one percent above the July 4, 1959 figure. Stocks represented 31,129,000 pounds of rayon tire cord and fabric; 17,770,000 pounds of nylon, and 589,000 pounds of cotton.

Acrolein—A major chemical firm will begin production of acrolein within the next few weeks. Interested in this building-block chemical for some fourteen years, the firm started up a pilot plant operation in 1946. This was shut down indefinitely a few years later, however, leaving the field open to a single competitor which had brought on stream a relatively small facility in the interim.

Initially (1946), acrolein was listed at $1 a pound, but the price was down to 75c. shortly thereafter. A big reduction followed and from 1952 to 1954 the drum carlot price was 47c. a pound on a works basis.

In 1955, a tankcar price of 46c. a pound was incorporated in the schedule for the first time, indicating greater commercial usage of the chemical. This price held until August 22, 1960, when the single producer dropped the schedule 15c. a pound across the board. This move established listing of 31c. a pound for tankcars, 36c. a pound for drum carloads, and 36¾c. a pound for less than carload quantities, f.o.b. works.

This latest reduction—coinciding with the on-stream date of the new producer—appears to be a case of beating the competition to the price block. Quite frequently, a new entrant into an established market will cut prices as the first step in its overall marketing strategy.

It's still possible, of course, that once this new producer begins shipping acrolein it will also take the ax to prices. According to some trade sources, a tankcar price of about 25c. a pound would go a long way toward spurring new end-use development, which is obviously required if the market is to expand progressively, as envisioned. It's said, for example, that acrolein may eventually rank with ethylene oxide as a basic raw material. At present, however, the chemical's sole big-use is in the production of methionine and there are only three major customers.

The new producer indicates that it will divert some of its acrolein capacity, estimated at between 30 and 40 million pounds a year, to the manufacture of glycerine.

Acrylonitrile—A major chemical firm has announced its entry into the ABS (acrylonitrile - butadiene - stylrene) polymers market. The move bodes well for this relatively new class of resins as well as for the raw materials that will be consumed in their manufacture—especially butadiene and acrylonitrile which are more than amply available.

Tough thermoplastics, ABS resins have diverse applications. Cited by the new producer, which will use the tradename "Abson" in marketing its products, is this impressive list: appliance parts where heat distortion poses problems, auto dashboards, refrigerator linings, luggage, helmets, telephone handsets, cowls and arm rests for autos and boats, camera cases, toys, tool handles and shoe heels.

Price Trends

Advanced
Trichloroacetic acid, tech., 2c. per lb.
Reduced
Corn syrup, 43° Be., 15c. per cwt.
Furfural, tanks, ½c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
131.22	132.09	132.08	130.47

For Current Prices see Page 10

Carbon Tetrachloride—Imports of carbon tetrachloride in June totaled 586,148 pounds, up from 238,600 pounds the previous month. The entire shipment was valued at $33,972 and dutied at $5,527.

Exporting to the US were: East Germany 365,688 pounds, valued at $19,472 and dutied at $3,654; and Italy 220,460 pounds, valued at $14,500 and dutied at $1,873. Off the roster for a change: Canada.

US exports of carbon tet in June amounted to 9,900 pounds and were valued at $1,420. This material, the Census bureau reports, went to Venezuela (2,400 pounds at $422) and Liberia (7,500 pounds at $998).

Trade reports indicate that demands for the chlorinated solvent for use in the manufacture of aerosol propellants are running into fairly good volume. This time of year, of course, manufacturers generally look for things to be seasonally slow.

The exceptionally cool summer has hampered home air conditioner sales reportedly, and, as a result, requirements for the refrigerants used in window-models dropped accordingly. This naturally had an adverse effect on demand for carbon tet, a raw material in refrigerants manufacture.

Corn Syrup—A major producer of corn syrup told its customers last week that it was reestablishing the price schedule in effect prior to August 15, when price advances amounting to 15 cents per hundred pounds were posted for all grades of the material.

The firm's announcement follows:

"On August 15, 1960, we adjusted our corn syrup unmixed prices to cover some of the increased operating costs and correct discrepancies in corn syrup pricing structure which have developed during the years since our last price change on July 30, 1956.

"Although a change in price structure was warranted, the decision now has been made to absorb these added costs.

"This is your notification that all of our prices on corn syrup unmixed including the differentials between various grades revert to the basis in effect prior to August 15.

"This change is retroactive and adjustments will be made to compensate you on billings not in line with our present prices . . ."

Ethanolamines—"Never has the detergent business been so liquid as it is today," gleefully reports a leading producer of diethanolamine and other chemical raw materials used in the manufacture of this new breed of cleaning agents.

In fact, the company says, liquid detergents for total sales among household cleaners: Indicative of their progress to date: 1960 sales of "liquids" should hit 620 million pounds; five years ago, the figure was a mere 150 million.

First inroads into powdered detergent sales were made by liquid dishwashing detergents, of which there are today some 50 to 75 name brands on the market in addition to a host of regional brands. A major outlet for ethyl alcohol, these light-duty liquids should chalk up total sales of approximately 502 million pounds this year, it said.

Still more spectacular, however, is the growth of the newer liquid all-purpose detergents. Relatively small in 1955, sales are likely to reach 93 million pounds this year.

Acceptance of synthetic cleaners was not speedy or automatic. In 1948, 86

Aliphatic Organics

percent of the household cleaners sold were soap or soap-based. Today, the synthetic detergents, both liquids and powders, account for a whopping 78 percent of the household cleaners sold in the US.

The first commercial synthetic detergents were powders, put on the market 27 years ago. It took World War II, however, to give the industry its first big boost. Fats and oils, needed for soap, were declared essential for explosives manufacture, and the only choice left was to expand production of syndets and develop new and better types.

Looking to the future, industry authorities are confident that sales of syndets will continue to swell at the expense of soap. Also shaping up: the impending battle between liquid and powdered detergents in the heavy-duty field—detergents used for home washing machines.

"When this new breed of hard-working liquid detergents hits the market, it's a good bet that the 1960's will see a struggle by the liquid detergents to take over the powdered detergent market, just as the 1950's saw the syndets overwhelm soaps," our gleeful trade source concludes.

Gluconic Acid—Except for the slight consumer reaction to the higher prices posted in July, the gluconic acid market has been dull newswise.

Spokesman for a major producer indicates that demand is routinely good, supplies amply available.

The schedule, applicable to eastern deliveries, lists the tankcar price at 17c. a pound, the drum car-or truckload at 20c. a pound, and the 10,000-pound lot price at 21c. a pound, f.o.b. plant, freight prepaid.

On deliveries west of Denver, prices are uniformly 1½ cents a pound higher.

Furfural—A ½ cent per pound reduction in the tankcar price of furfural was posted by a producer last week (August 25). For Eastern delivery, the price is now 11½c. a pound; for western delivery, it's 12½c. a pound.

Drum carload and less carload listings were not changed.

Itaconic Acid—A relatively young chemical firm, which reports it has just brought on stream a citric acid facility having an annual capacity in excess of 16 million pounds a year, indicated recently that it is now interested in itaconic acid. Having the requisite fermentation facilities, it could easily turn out this chemical, provided, of course, it has the necessary technical know-how.

The question is, however, whether the market is big enough yet to support additional production. A spokesman for the one and only manufacturer of itaconic acid today indicates that while sales are increasing routinely, there is much development work to be done. More than this, he is reluctant to say, and understandably so with the competition breathing down his neck.

A year or more ago, indications were that new end-uses were in the offing that would boom demand for itaconic. Of late, little more has been told. It is known, of course, that anticipated markets are mainly in the sphere of plastics, and that perhaps is enough to cause outsiders to investigate the chemical's potential growth rate.

Methanol—Methanol exports, at 2,727,430 gallons in April, fell to 1,588,653 in May, and thence to 1,510,957 in June. Nonetheless, the cumulative total for the first six months of the year—11,904,536 gallons—indicates that exports this year could surpass the 17.7 million gallons shipped abroad in 1959.

But by 1962, a recent study by OPD showed, this substantial foreign market may be dried up. At that time, overseas capacities are expected to hit 400 million gallons annually, an increase of about 25 percent compared with known levels today.

US capacity will rise at the same time though on a much more conservative scale. Currently estimated at 330.5 million gallons, domestic capacity is expected to be nearer 353.5 million in 1961 if slated expansions are completed.

This will mean, of course, that there will be considerable excess capacity. Output in 1960, for instance, is likely to hit 282 million gallons, and while gradual increases are expected year-to-year, production of 350 million gallons, which would be in line with capacity, is not likely before 1965, OPD found. (Reprints of the methanol depth report, which appeared in OPD, 7/18/60, are now available.)

Returning to the trade picture . . . June exports, valued at $316,218, went to: West Germany 768,259 gallons at $128,269; Mexico 182,840 at $55,724; and Belgium 482,726 at $92,231.

Molasses—Markets for feeding cane molasses were mostly steady, although weakness did appear in parts of the South and Midwest, during the week ended August 16. Shipments based on previous orders continued at a moderate rate, however.

New Orleans prices remained unchanged at 10c. to 10.5c. a gallon. East and west coast prices were also maintained in light trading, Agricultural Marketing Service reported.

Imports of industrial and feed molasases during June totaled 40.3 million gallons, down 18 million gallons from May, but up 15 million gallons from June, 1959.

Total molasses imports for the first six months of the year were 244.5 million gallons, compared with 157.0 million during the comparable period in '59.

Sucrose — Cuban sugar production reached 6,459,000 tons on July 31, with one mill still grinding. This figure was some 15,000 tons below the limit set by government decree.

An estimated 9.5 million tons of sugar cane remained uncut at July's end. This, of course, boosts the output potential for 1961.

The Cuban Sugar Cane Growers Association says that the uncut tonnage plus the fact that recent heavy rains have stimulated cane growth will offset to some degree the small plantings of new cane and poor cultivation of the fields this year.

Cuban sugar exports from January 1 through July 15, 1960, were 3,468,000 tons, compared with exports of 2,317,000 and 3,226,000 tons for the comparable periods of 1959 and 1958.

Securing of several new markets and stepped-up sales to some regular customers have accounted for the export increase thus far this year. Exports to the USSR through June 15 were 689,000 tons, compared with 302,000 during all of 1959 and 207,000 in 1958.

Trichloroacetic Acid—Technnical trichloroacetic acid was advanced 2 cents a pound by a major producer last week. For carload lots in 300-pound drums, the listing became 52c. a pound.

Polyethylene Flash-Fires

—Continued from page 3

make it easily moldable, it becomes increasingly flammable.

On all fronts, SPI pointed out in a special conference with OPD editors last week, the industry is moving with vigor against the problem.

For instance:

After the hospital fire, plastics makers were advised of the happening by university officials, and the Minneapolis Fire Department scheduled a burning waste basket demonstration during a safety program. Dow Chemical Company, U. S. Industrial Chemicals Company and Union Carbide Corporation hastened to send their top polyethylene scientists to the demonstration. SPI experts joined them.

Carbide at the time took the opportunity to demonstrate its flame-resistant polystyrene as a possible alternative to materials already in use.

W. R. Grace & Co., since December, 1958, has had several grades of flameproof polyethylene (OPD, 12/21/58). Grace boasts that it is the first to have made a workable flameproof polyethylene—either high or low density.

Other companies, and the Society for the Plastics Industry itself, are working on the program, determined to head off anything similar to the plastic bag scare.

Just a Little Water

The ironic part of the whole situation is that half a cup or so of water will cause a flareup, but a quart of water will put a fire out. Strangely, it takes just the right amount of water.

G. W. Frawley, director of services and supply for the University of Minnesota hospital, told OPD last week: "We've had a number of troublesome fires."

However, he emphasized that the hospital wasn't about to chuck all 2,500-3,000 baskets out. What he did say was that as soon as the industry comes up with a solution to the problem, he would be glad to phase in new fire-retardant wastebaskets.

"We're sure not going to buy any more of the type we have now," Mr. Frawley said, "and we're going to replace the present ones with fire-retardant plastic as soon as possible."

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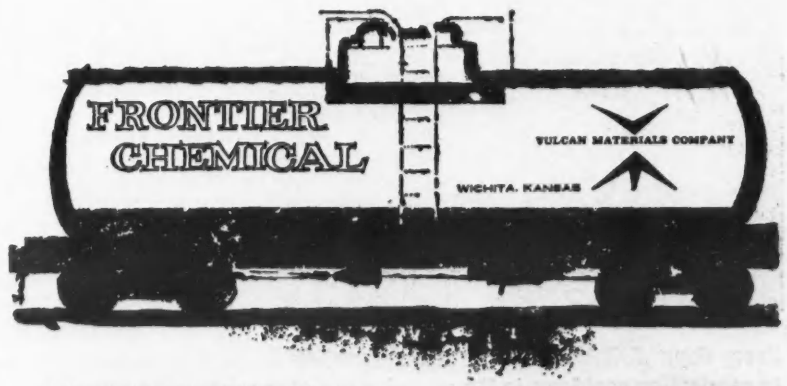

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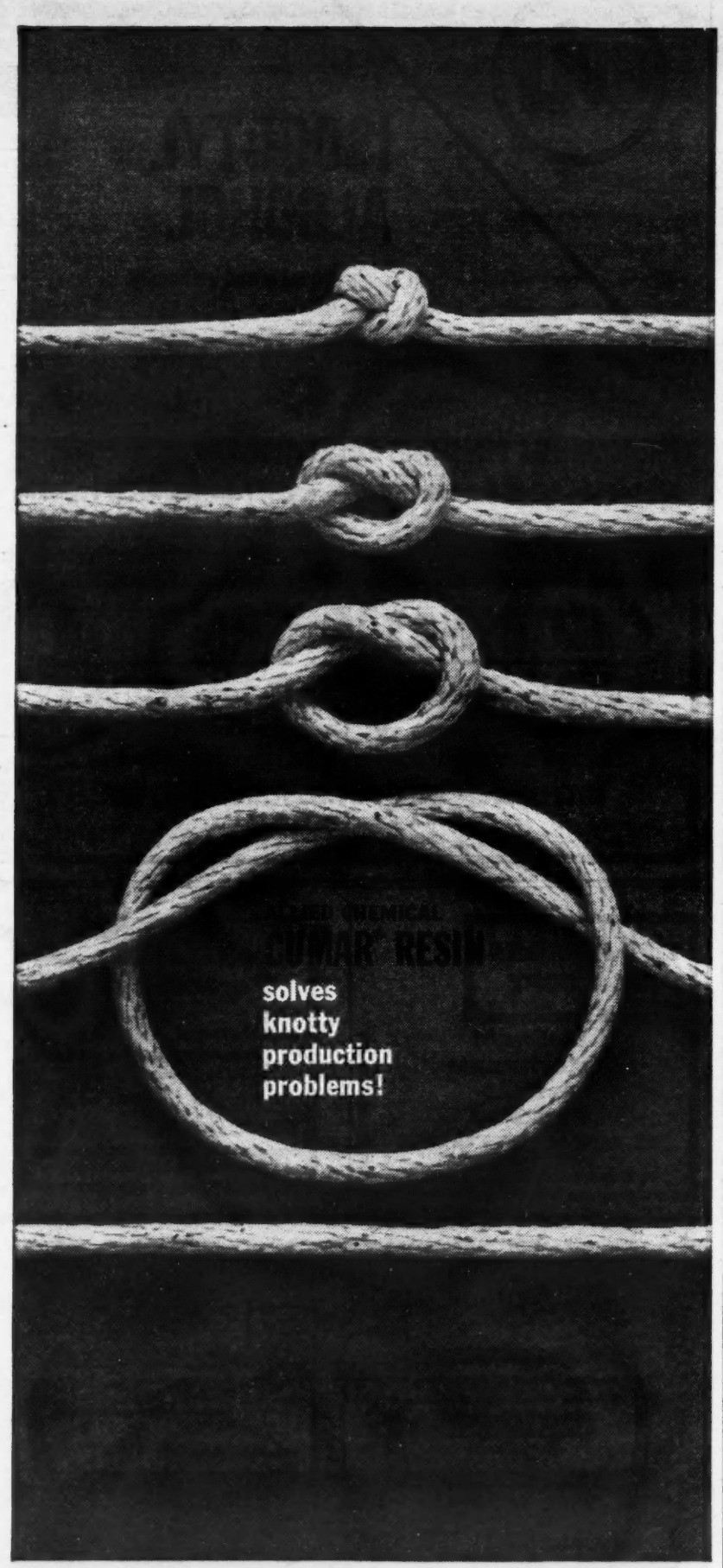

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Coal Chemicals

Trading in the latter part of August served to push coal chemical sales beyond projections made for the month, according to most reports. There was some speculation as to whether the flurry was the start of a fourth quarter pickup or merely the replenishing of stocks by consumers who have been working from extremely low inventory positions. Price action has been at a minimum. Competitive pressures in a number of areas have kept a tight rein on prices despite the continued increase in costs.

A sudden spurt in a-picoline demand has caused producers to speculate on possible new end-uses which may have developed for the material. Supply has shortened and makers posted a 5 cents per pound across the board advance in price at the first of the month.

Naphthalene and phthalic anhydride continue on the light supply list. There is some report of easing in maleic anhydride as a result of leveling off in demand for polyesters for use in the production of fiberglass boats. Overall market remains in light supply however.

Production of all types of synthetic rubber in June of this year totaled 122,547 long tons compared with 126,804 tons in the previous month and 106,716 tons in June of last year. Stocks of natural and synthetic rubber in the hands of industry at the end of the month amounted to 302,637 long tons as against 310,025 tons at the beginning of the month and 264,296 tons at the close of June last year.

The Tariff Commission released its preliminary report on US production and sales of cyclic intermediates during 1959. According to the report, total output of cyclic intermediates last year amounted to 8,457 million pounds, or 27.3 percent more than the 6,643 million pounds turned out in the previous year. Three-fifths of '59 output was for captive use, while the balance was for sale in the open market. Sales for the year amounted to 3,510 million pounds valued at $555 million, compared with 2,646 million pounds valued at $439 in 1958.

Large volume intermediates, output of which was substantially more in 1959 than in 1958 were monochlorobenzene, up 45 percent; phenol, 37 percent; cumene, 20 percent; and naphthalene, 17 percent.

The Commission also reported production of synthetic organic pigments in 1959 was the largest for any year since 1955. Output totaled 42.6 million pounds, a gain of 20.3 percent over the 35.4 million pounds turned out in 1958. Sales amounted to 33.2 million pounds valued at $65.4 million compared with sales of 27.8 million pounds with a value of $53.4 million in 1958.

American Iron and Steel Institute estimated that steel production in the week ended August 28 would amount to 54.5 percent of theoretical capacity equivalent to 1,552,000 net tons of steel. Output in the week previous was 1,558,000 tons, 1,520,000 in the comparable week one month ago and 332,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
118.28	118.28	118.40	118.45

For Current Prices see Page 10

Basic Products

Benzene—Output from cokeovens has been slowed of late due to lower coking and steel operating rates. Although petroleum companies have stepped up production considerably, they have been unable to close the gap between supply and demand.

Pricewise, rumors in the trade indicate the market may be in for another increase for the fourth quarter. Guesses on the extent of the change range from 2c. to 3½c. a gallon.

Coaltar—Continued low steel and cokeoven operating rates tends to slow production of by-product chemicals. Production of crude tar in June amounted to 56.5 million gallons as compared to 71.4 million gallons in the corresponding month last year. Output in the first six months of this year was 411.2 million gallons as compared with 431 million gallons in the six-month period last year.

Cresols—Supply position is comfortable, according to most reports. Meta-para and ortho-meta-para fractions are moving in more or less routine volume, although some improvement is noted over the situation prevailing at the first of the year. Projections for August have been exceeded.

Cumene—A petrochemical producer recently announced startup of a 70 million pound per year cumene plant at Westville, N.J. The unit will serve synthetic phenol producers who make their phenol via the cumene process. This method utilizes liquid-phase air oxidation of cumene to cumene hydroperoxide, which is then decomposed to acetone and phenol with hot acid. The cumene may be made by liquid-phase or vapor-phase alkylation of benzene with propylene.

The company indicates that the Westville unit will go through a "shakedown" period and that material will be available to the market shortly. Some of the plant's output has been contracted for, but it is expected that there will be some additional material available to the open market.

Naphthalene — Crude and refined naphthalene remain in very short supply. Low steel and coking operations have served to lengthen the period of shortage brought on by the steel strike last year.

Imports in the first half of the year totaled 20.8 million pounds, about 12 million pounds less than in the comparable period last year. Total imports last year amounted to 60 million pounds as against 80 million in '58. Some sources estimate that naphthalene imports this year may fall below 45 million pounds.

Tariff Commission reported production of refined flake naphthalene from domestic crude naphthalene amounted to 28,347,000 pounds last year as against 44,053,000 pounds produced from imported crude. Sales of the domestic product were 12,945,000 pounds valued at $1,678,000 with average value of 13c. per opund. The figures compare with sales from import crude totaling 25,308,000 pounds valued at $3,021,000 and average value of 12c. per pound.

Phenol—Demand in this market has been well sustained. Natural phenol remains in good demand, although the market does not reflect the brisk pace of a year ago.

a-Picoline—A sudden spurt in demand has caused producers to wonder about possible new end uses which may have developed for this material. Supply has shortened. Most producers posted a 5c. per pound across the board advance in the price of a-picoline at the first of the month.

Pyridine—Producers are unable to supply market demand. All indications are for a continuation of the short supply situation for the balance of this year and into '61.

Xylenols—Materials remain in long supply. Producers have been hard-pressed to maintain a comfortable inventory balance.

Dyes

U.S. Tariff Commission reported production of dyes last year amounted to 168 million pounds, a 20 percent gain over the 140 million pounds turned out in 1958 and 17 percent more than production of 143 million pounds during 1957.

Sales last year were 157 million pounds valued at $203 million, compared with 139 million pounds valued at $177 million in 1958. In terms of quantity, sales of dyes in 1959 were 13 percent larger and in terms of value, 15 percent larger.

With respect to dyes grouped by class of application, four classes of dyes accounted for more than 70 percent of total output last year. Vat dyes accounted for 28 percent of the total; sulfur dyes, for

Coal Chemicals

19 percent; direct dyes, 15 percent; and acid dyes, for 9 percent.

Percentagewise, production was up for a number of important dyes last year. Direct Black EW gained 26 percent over '58; Vat Green 3, up 69 percent; Vat Yellow 2 and Vat Black 25, each 50 percent; Direct Yellow 6, gained 38 percent; Mordant Black 17, up 30 percent; Acid Black 1, increased 29 percent; and Mordant Black 11 production in 1959 was 3.8 million pounds, double that of the previous year.

Output of a few important dyes was lower last year than in 1958. Vat Green 9 production was 0.9 million pounds, a drop of 36 percent from the 1.4 million pounds produced in the previous year. Output of Direct Black 80 was 23 percent smaller; and that of Vat Blue 6 and Vat Green 1 were each 9 percent smaller.

Intermediates

Aniline—Expansions of recent years have made use of catalytic vapor-phase reduction of nitrobenzene in the production of aniline as against older methods of liquid-phase reduction of nitrobenzene with iron borings and hydrochloric acid or ammonolysis of monochlorobenzene.

In vapor-phase reduction, both fluid-bed and fixed-bed plants have been operated with the balance of favor apparently falling with the fluid-bed process. Yields from vapor-phase reduction are reported superior to those gained from the liquid-phase reduction process.

Maleic Anhydride—Sources anticipate an easing of the light supply position reported in this market for many months. As yet distribution in the overall market remains uneven.

Demand for polyesters in the boat-building industry shows indications of again following a seasonal pattern. For the past year and a half, chemical sources point out, there has been a steady, year round demand for polyesters used in production of fiberglass boats. However, inventories of finished boats are reported heavy and some adjustment will have to take place.

Naphthalenesulfonic Acids—Yearly report of the Tariff Commission indicated production of selected naphthalenesulfonic acids was as follows during 1959:

	Pounds	
Acid	1959 *Prod.*	1958 *Prod.*
Amino I	1,117,000	647,000
Amino G	701,000	*
Tobias	3,238,000	2,329,000
Laurent's	136,000	149,000
1,6-Cleve's	257,000	173,000
Cleve's, mixed	368,000	81,000
Broenner's	103,000	62,000
Peri	469,000	328,000
1,7-Cleve's	253,000	253,000
H Acid	2,999,000	2,097,000
Chicago	82,000	*
1,2,4-Acid	2,038,000	1,114,000
Total	11,761,000	7,213,000

*Not reported.

Phthalic Anhydride—Market has been unchanged since some producers raised price 2c. per pound across the board on July 1. Other makers had previously reported 2c. advances on April 1 of this year. The current quote on flake material in bags, carload, frt. equald., is 19c. per pound.

Supplywise, veteran sources anticipate that phthalic will remain on the light supply list for some time to come, although there has been some lessening in pressure during recent weeks.

Styrene Monomer—Total production of synthetic rubber in June amounted to 122,547 long tons with consumption of 95,849 tons and stocks on hand at the end of the month amounting to 226,032 long tons.

Production of S-type rubber was 98,635 long tons in June and 619,995 tons in the first six months of the year as compared with 530,465 tons in the corresponding period of last year.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended August 28, were as follows:

Ammonia liquor	lbs.	491,422
Ammonium sulfate	lbs.	20,667,053
Benzene	gals.	1,992,991
Coaltar	gals.	10,883,202
Crude chemical oil	gals.	318,514
Solvent naphtha	gals.	63,702
Toluene	gals.	445,920
Xylene	gals.	127,405

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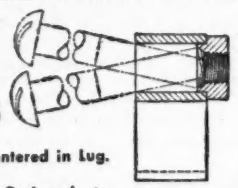

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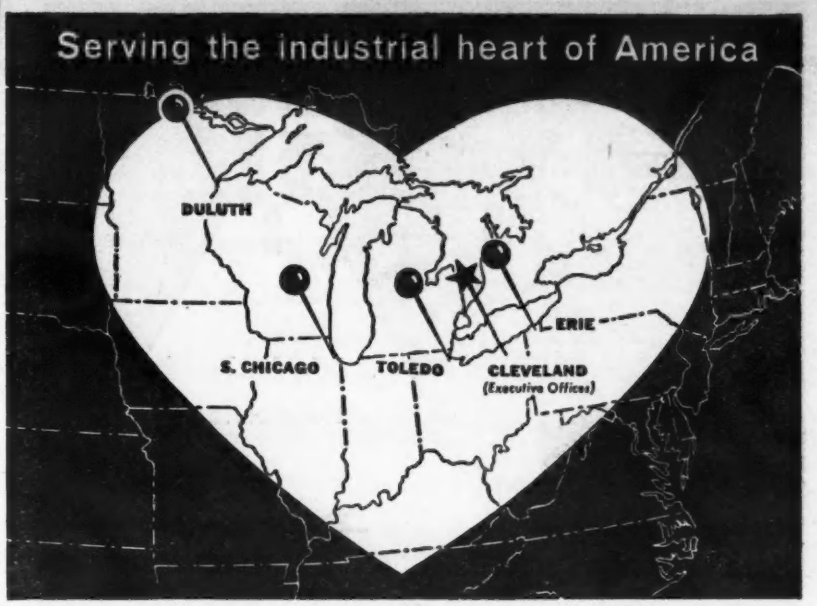

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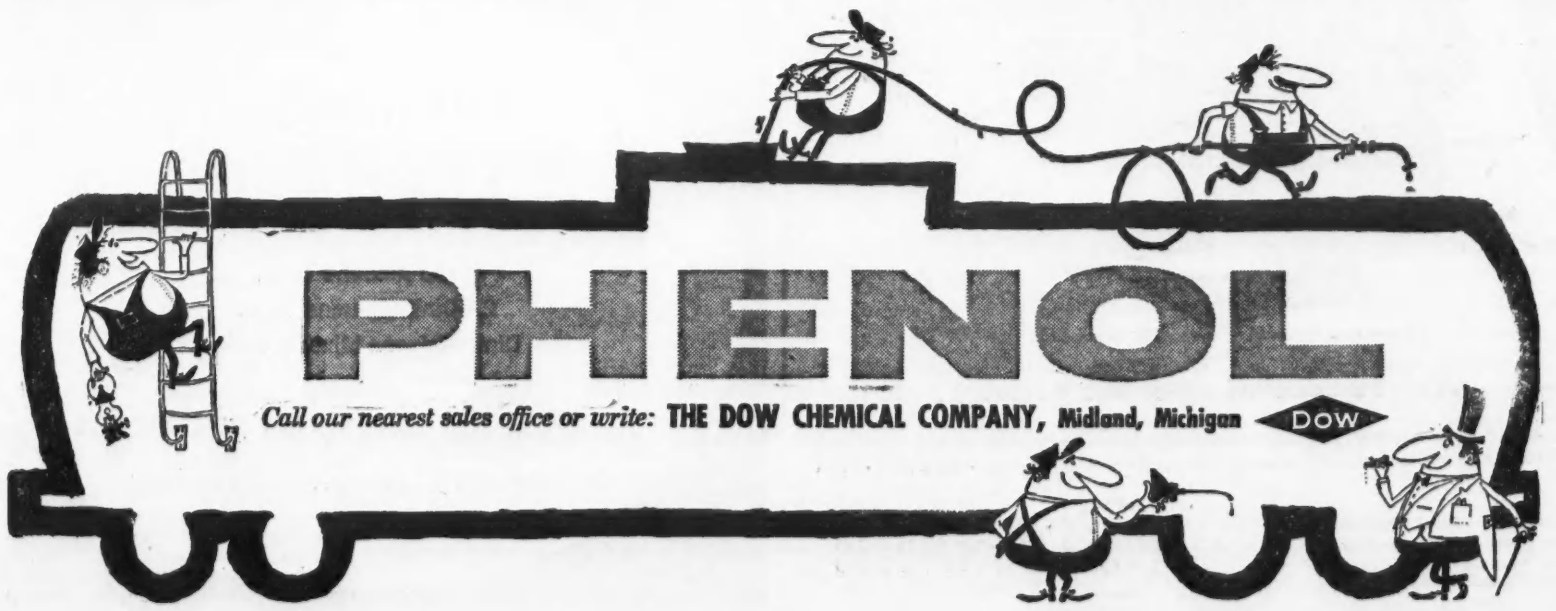

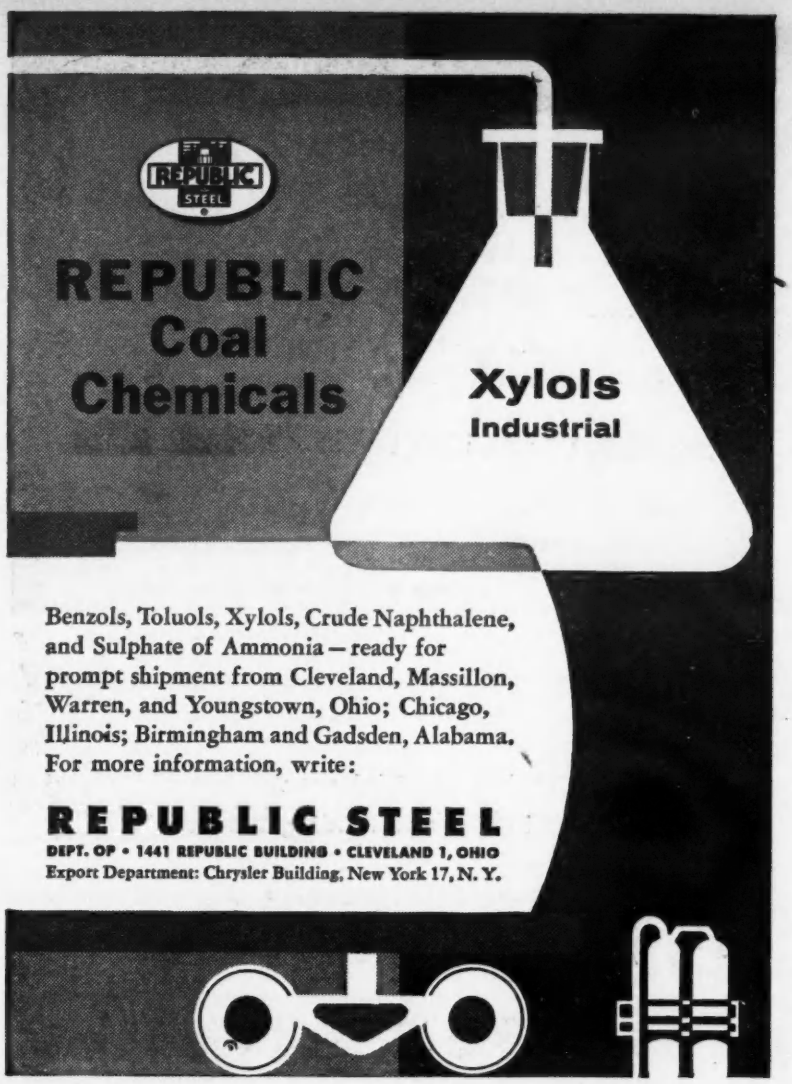
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Obituaries

Charles M. Lemperly

Charles M. Lemperly, retired director of public relations and member of the board of directors of Sherwin-Williams Company, Cleveland, Ohio, died August 18 in that city. He was seventy-two years old.

Mr. Lemperly, who joined S-W in 1907, served for many years as advertising manager. In 1943 he was named a vice-president and director of sales. Two years later Mr. Lemperly was elected to the board of directors. In 1952 he was appointed director of public relations. He retired from that position a year later and from the board of directors in 1956.

James Cosgrove, retired board chairman of Continental Oil Company, Houston, Tex., died August 22 in New York. He was seventy-three years old.

Louis F. Hall, retired president of Sanco Piece Dye Works, Phillipsburg, N.J., died August 20 in Lake Placid, N.Y. He was eighty years old.

Reginald G. Kimball, former general manager of Esso Standard Oil Company's inland waterways department, died August 23 in Blairstown, N.J. He was sixty-nine years old.

Arthur E. Wood, who retired in 1946 as associate professor of chemistry at Colgate University, died August 21 in Hamilton, N.Y. He was eighty-two years old.

Potassium Permanganate

—Continued from page 3

internally or by application to any mucous membranes or for use in the vagina."

Any other preparation of potassium permanganate intended for over-the-counter sale will be regarded as misbranded unless:

1. It is an aqueous solution containing not more than 0.04 percent potassium permanganate.

2. The label bears, "in juxtaposition with adequate directions for use," clear warning statements designated as "Warning" and to the effect: "Warning—for external use on the skin only. Severe injury may result from use internally or as a douche. Avoid contact with mucous membranes."

FDA's potassium permanganate ruling will go into effect on October 22.

Carbon Dioxide Liquid Seen Eclipsing Dry Ice

A growing trend toward use of liquid carbon dioxide as a coolant in industry is underscored in a report from the Cardox division of Chemetron Corporation.

Production of the liquid form last year totaled 398,897 tons, as compared with only 204,170 in 1955, a spokesman for the division notes. In the same period, output of competitive dry ice dropped to 481,235 tons from 572,583. The liquid form's rising star is attributed to its easier control and metering.

Hepatonic Bill Gains

The senate finance committee last week approved a bill (HR 12659) to suspend for the present duty on hepatonic acid. The material is used in the production of special lubricants and brake fluids, particularly for military aircraft.

Century Chemical

—Continued from page 3

dent. He is vice-president of the Stone & Webster organization.

Theodore S. Hodgins, president and founder of the two-year-old company, has been named chairman of the board. The post of president is now vacant.

According to published reports, Mr. Hodgins has returned to the company 470,000 shares of Class B stock—all the outstanding shares of that issue. Reportedly, he retains 11,000 shares of Class A Common outstanding. Repeated attempts to reach Mr. Hodgins and verify this report were unsuccessful.

The chemical company's sales have reportedly declined to an annual rate of about $5 million a year from a former peak of $10 million. For the fiscal year ended June 30, Century showed a net loss of $500,000. The company recently reduced its roster of employees from 200 to seventy-five, it is said.

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Agricultural Chemicals

The North Carolina State Department of Agriculture confirmed reports last week that heptachlor is being used on alfalfa crops in that state. The insecticide's use has been on the FDA's restricted list since the beginning of the year. Spokesman for the department explained the use of heptachlor on the crop after investigations revealed that the insecticide proved effective against the boll weevil, while leaving a low level of residue on the crop that could be transferred when the crop was used as animal feed.

The timing of the application was stressed. In North Carolina, it seems that the best time for the application is before October 15. At that time the weevil enters its reproductive cycle, destroying the insect before it can breed further generations. It was also determined by the department that alfalfa crops when treated with heptachlor during this period are relatively free from residue formations.

Reports indicate that the nation's biggest crop year is in sight as favorable weather brought gains in yield prospects for several major crops in July. As of August 1, the US Department of Agriculture estimated crop production to be 119 percent of the 1947-49 average, one point above the record levels of 1958 and 1959. Food grain and oilseed production are substantially above a year ago and more than offset smaller production forecasts for feed grains.

Winter wheat and oats yields exceeded earlier estimates, while prospects for corn yields improved during July, the crop is reported to be still behind normal. In contrast, spring wheat and barley yield prospects declined in July due to hot, dry weather in major producing states.

Little change is reported in the formula feed sales market. The general trend seems to point to slower demand with market activity in its usual August slump. Consumption of feed stuffs in June was 200,000 tons more than the previous month but 15,000 tons less than a year earlier, according to reports from the US Department of Agriculture.

The USDA reports that potatoes can be stored at 55 degrees Fahrenheit for as much as a year without sprouting when treated with an 0.25 to 0.5 percent solution of CIPC (isopropyl N (3-chlorophenyl carbamate). The chemical has been accepted by the department for registration. Since sprouting lowers potato quality, the chemical should find wide use in the treatment of potatoes that normally would be stored at temperatures below 50 degrees Fahrenheit.

Animal and Plant Foods

Animal Proteins—Quotations for fishmeal were down $1 per ton from their recent low of $94 to $93 per ton. Latest quotes call for a range of $94 to $92 per ton, bagged on both Atlantic and Gulf coasts. Fishscrap is at $88 to $90 per ton, same basis. Production of fishmeal and scrap is reported to be fair, with market activity on the dull side.

Lime—In its final report on 'Lime in 1959,' the Bureau of Mines reports that during the year 18 percent more lime was manufactured than in 1956, the previous record year. Total US production of open-market and captive lime in 1959 was 12.5 million short tons, or 36 percent more than the 9.2 million short tons reported for 1958. Captive lime increased 125 percent, primarily because of more complete coverage of lime production for use in manufacturing alkalies.

All major use categories of lime increased over 1958, except for agricultural uses, which remained about the same. Agricultural use of lime totaled 196,125 short tons in 1958, as against 195,554 short tons in 1959. Value of the lime consumed was $2,580,906 in 1958 and $2,468,465 in 1959.

Lime sold or used in June decreased compared to the previous month output, according to reports by producers to the Bureau of Mines. Construction lime increased while decreases were noted in refractory, agricultural, and chemical and other uses. Open-market lime constitutes approximately two-thirds of the total lime reported and the remaining one-third of the total lime is captive tonnage.

Agricultural sources consumed over 12,000 short tons of lime in June, or about 10,000 tons less that in May. The total for the period January-June was 88,553 tons, well below the amount used in the same period last year. For the same months last year, over 100,000 tons of lime was used or sold by producers.

Price Trends

Advanced
None

Reduced
Fishmeal and scrap, $1 per ton

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 23, 1959
109.97	109.97	109.97	111.14

For Current Prices see Page 10

Nitrogen Solutions—Activity in this market should be picking up shortly as preparations for fall planting get into full swing. Market activity is reported to be still seasonally quiet.

Pesticides

Heptachlor—The possibility that the use of heptachlor may be granted greater freedom of application was confirmed last week by OPD. Previously published reports had indicated that a partial lifting of the ban on heptachlor use had been authorized in North Carolina for use on alfalfa crops.

The Food & Drug Administration restricted the use of heptachlor after the discovery that heptachlor under certain conditions left a residude called heptachlor peroxide (OPD, Jan. 25, 1960). In April the FDA advised registrants of pesticide formulations that usage on certain food and feed crops, in specified dosages, was acceptable. (OPD, April 18, 1960).

While all uses on non-food crops continued to be acceptable, use of heptachlor for "soil use only" was granted to such crops as corn, blackberries, cranberries, citrus fruits, cherries, lima beans, tomatoes and peppers. The pesticide was also granted use for pre-planting application of small grains and pineapples.

Contacted by OPD last week, Mr. Ballentine, head of the North Carolina State Department of Agriculture, confirmed the report that heptachlor was being used on alfalfa crops in that state.

The use of the pesticide was decided on after some farmers were restricted in the sale of their milk due to unusually high levels of pesticides found in the milk. Citing one example, Mr. Ballentine reported that one farmer was prevented from selling his milk for nearly four months due to contamination by pesticides. The use of heptachlor, it was found, provided protection for alfalfa crops without exceeding, what Mr. Ballentine termed operational tolerances.

While the use of the insecticide was not the outcome of a long range research project, its use is based on the finding that in North Carolina, heptachlor applications work best if applied at certain intervals during the crop year on established standings. The date is believed to vary from state to state with the movement of the boll weevil and its reproductive cycle. The timing of the application is extremely important. The strategy employed is a balance between two factors. One is to catch the weevil at about the time it is entering its reproductive stage, and at the same time providing a minimum of residue formation on the crop. In North Carolina, the best time for the application of heptachlor is before Oct. 15.

Questioned about the possibility of some jurisdictional conflict with the FDA over this use of heptachlor, Mr. Ballentine replied that he felt the tolerances that his department were operating under were within the limits established by the FDA. In addition, he pointed out that the interstate movement of hay from North Carolina was virtually non-existent due to the shortage of hay in that state.

Infestation counts of the boll weevil are reported by the US Department of Agriculture to be holding at relatively high levels in a number of areas. Third generation boll weevils are appearing in South Carolina and Arkansas, with weevil activity expected to increase in Mississippi and Louisiana after the recent heavy rain fall.

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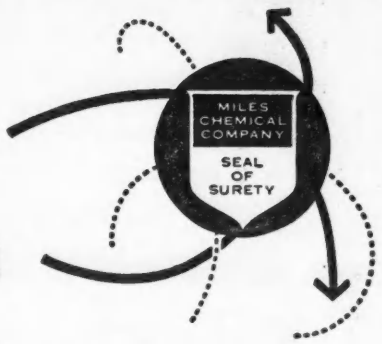

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25-60

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Drugs, Fine Chemicals

A new producer of citric acid, which brought a 16-million-pound-per-year plant on stream August 3, expects to begin shipments of the chemical before the month is out. By that time, reportedly, the firm will have collected sufficient inventories to make deliveries to a marketing network embracing some thirty-odd distributors in various sections of the country. Then, provided all works out as planned and its domestic operation is running smoothly, the firm will focus its attention on foreign markets where its economical cane blackstrap process for making citric has already aroused the interests of governments and private financial interests.

A spokesman for this new citric manufacturer told OPD last week that the company is not interested in licensing arrangements, but wants, instead, joint participation with foreign interests—barring those in Cuba. As luck will have it, the "bearded isle" is ideally raw material availabiity and the easy access to US and South American markets, but the political climate, as industry well knows, is hardly favorable.

OPD also learned last week that the firm contemplates no cut in citric acid prices and that it is well into the pilot work on its next project, itaconic acid production. Its primary interest here is in the acid esters, which are likely to be very big in the plasticizer field one day soon.

Growing simultaneously with citric acid capacity is the end-use pattern. In the industrial field, where much growth is in the acid esters, which are expected is anticipated, there's a new process using citric for direct-on porcelain enameling of appliances and lighting fixtures. This application, while still in the experimental stage, is thought to have much potential. Obviously, it would save manufacturers of washing machines, for example, considerable time and money by making a primer coating unnecessary.

Interest in the process quickened recently with the development of a low-carbon steel that lends itself beautifully to direct-on porcelain enameling.

Pre-operational cleaning of stainless steel equipment is another end-use that is growing steadily, a spokesman for the oldest firm in the business reports. He notes also that much research is being done on citric, one-time used almost exclusively in the food and beverage area, and that many new ideas look promising. Citric, anyone-else?

Caffeine—Increased consumption of cola beverages has enabled caffeine producers to move considerable volume this summer while demand from pharmaceutical end-users was seasonally off. The return of the latter to the marketplace is expected shortly.

US production of caffeine, both natural and synthetic, last year amounted to 1,933,000 pounds while sales were 1,886,000 pounds valued at $3,801,000. This comes out to an average price of $2.02 a pound.

Sales of caffeine citrate were 2,000 pounds, valued at $9,000. Output was not reported.

The domestic industry continues to face stiff competition from abroad. Any sales gains, reportedly, are due mostly to increased requirements overall rather than a buyer's preference for US material. It seems that in this or any other market where both a foreign and a domestic product is available, buyers tend to split their requirement between both sources on a regular percentage basis. Thus, when their needs increase, they split the order between both suppliers.

Camphor—June imports of natural, refined camphor, totaling 8,000 pounds, came from Taiwan (7,500 pounds, valued at $2,757 and dutied at $223), and Japan (500 pounds, valued at $445 and dutied at $14).

The same month, synthetic camphor imports amounted to 121,000 pounds, valued at $47,890 and dutied at $6,042. The United Kingdom, accounting for 84,000 pounds, was the largest supplier.

Menthol—A look at the Korean menthol industry is provided by the US Department of Commerce in the June issue of Chemical and Rubber. Here are the highlights of the article.

Two facilities in Korea produce menthol and also distill the peppermint oil raw material from peppermint plants. Their combined annual capacity, based upon 300 days of operation, is 195,000 pounds of menthol and 138,000 pounds of cornmint oil.

Acreage planted to peppermint in Korea increased 310 percent in the last three years. In 1958, 2,989 acres were planted; in 1959, 9,804 acres; and in 1960, 12,255 acres.

The yield of oil, which depends upon the species planted, type of soil, weather, and weeding and other plant care, has increased at the same time some 20 percent due mostly to improved selection and cultivation.

The yield of peppermint oil per acre was 132 pounds in 1958; 145 pounds in 1959, and 158 pounds in 1960.

Penicillin — Penicillin production reached an all-time high of 151,548 billion units in the first quarter of 1960, a 38 percent increase over the like period in 1959, Business and Defense Services Administration reports.

During the same period, BDSA says, exports, of which about two-thirds were in bulk form, were up slightly to 30,317 billion units, major shipments going to Canada, France, Mexico, and Hong Kong. Mexico took large shipments in dosage forms.

Continuing with its analysis of the figures, BDSA says that while output of streptomycin was down slightly, DHS was up 22 percent to 76.8 million grams in the first quarter. Export demand, however, dropped sharply from a year ago.

Piperazine—Production of piperazine derivatives in 1959, the Tariff Commission reports, was 474,000 pounds. Sales amounted to 439,000 pounds, valued at $468,000. Average price: $1.07 per pound.

Polio Vaccine — After much ado, the government last week (August 24) finally approved the Sabin oral, live-virus polio vaccine. Making the official announcement, Surgeon General Leroy E. Burney said that the government had found the vaccine safe and suitable for use in the US.

Not approved, however, were two other live-virus vaccines, one developed by Dr. Hilary Koprowski, the other by Dr. Harold Cox.

Dr. Burney said that the government moved conservatively in approving only the Sabin vaccine because it wanted to work out regulations for its safe use. He added that approval of the Cox and Koprowski vaccines was being withheld at least temporarily because they were found to be virulent in some test monkeys.

Public Health Service is not expected to license the manufacture of the Sabin vaccine until next Spring.

Pyridoxine Hydrochloride—Price weakness persists. Sales are being made at lowest-ever levels of $95 a kilo for a minimum order of 5-kilos and $100 a kilo for lesser quantities, according to reports from trade sources.

Imports probably figure in the price decline. But as to what extent, it's difficult to say since Bureau of Census statistics for July have not yet been published.

Based on reports of imports in earlier months, however, it would appear that competition among the domestic makers is the greater factor in the steady downtrend in B_6 prices. For example, only 332 pounds of the vitamin was imported here in June, and none at all in May. April volume, at 1,194 pounds, was quite considerable, however, considering that domestic production averaged out at 5,000 pounds monthly in 1959 (Total for the year: 60,000 pounds, according to the Tariff Commission).

It's possible, of course, that the lower prices are now freezing out the foreign competition.

Quinine—While no quinine sulfate was

—Continued on page 48

Price Trends

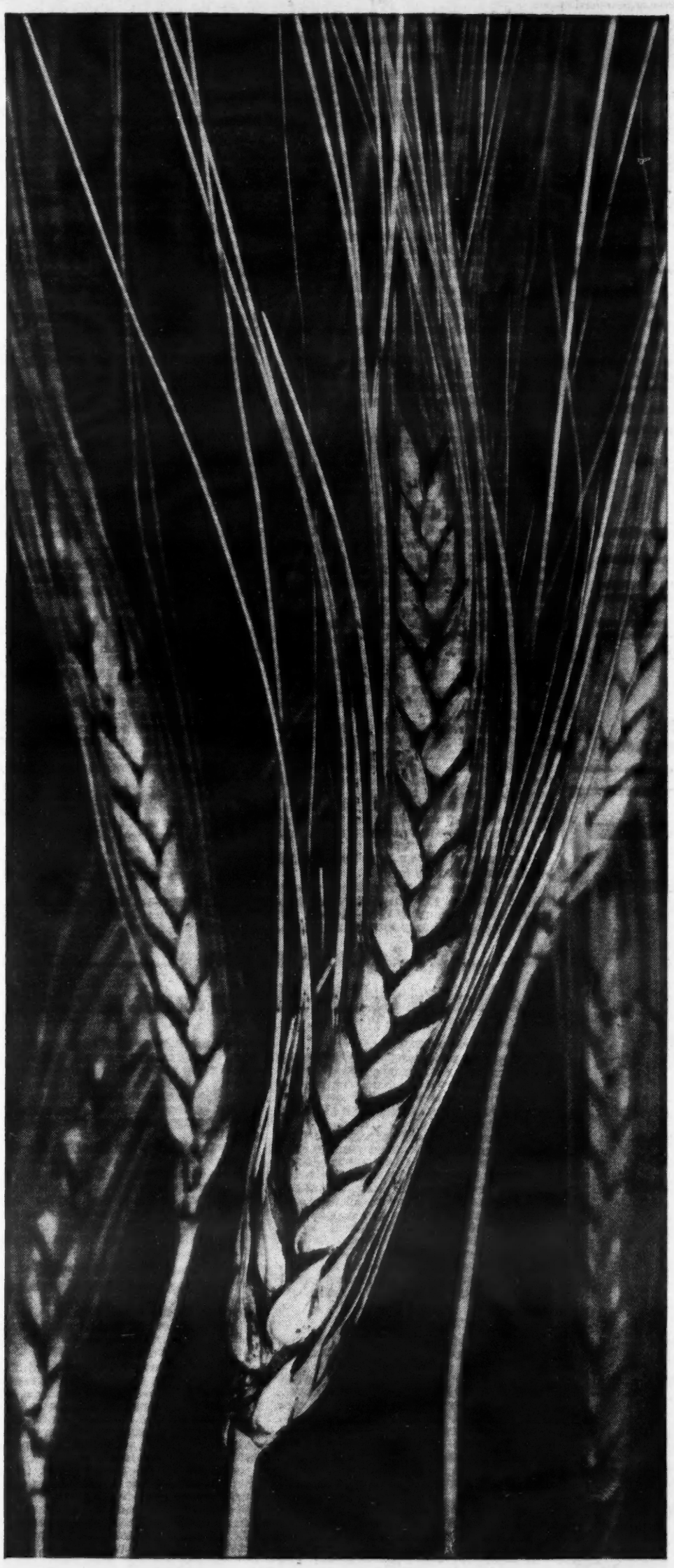
Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
59.93	59.3	59.3	60.49

For Current Prices see Page 10



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Drugs, Fine Chemicals

—*Continued from page 44*

imported in June, there were shipments of quinidine and derivative salts from the Netherlands and West Germany. According to the Census Bureau, these totaled 112,113 ounces and were valued at $86,125.

In addition, 10,000 ounces of quinidine powder were imported at $7,386, and 72,607 ounces of salts and alkaloids derived from cinchona bark at $17,710. The Netherlands and West Germany supplied this material also.

General Services Administration is now arranging for its quinine sale which is expected to come off in about six months. This marks the third time that the agency has tried to unload its quinine horde. Earlier attempts collapsed when the agency and interested parties in the industry couldn't see eye-to-eye on prices.

Sulfa Drugs—The Tariff Commission reports output of sulfa drugs in 1959 was 5,835,000 pounds. Sales figures, however, were not disclosed because publication would reveal the operations of individual companies.

Analyzing the statistics, Business and Defense Services Administration of the Commerce department reports that output of sulfa drugs in the first quarter of 1960, measuring 1,465,000 pounds, was up 13 percent from 1959. Exports at the same time were up 27 percent, with a sharp increase occurring in shipment of items in the "not elsewhere classified" group, which includes many of the newer sulfonamides not produced in foreign countries. This trend has continued, as evidenced by trade statistics for the second quarter of the year.

Tartrates—June imports of tartaric acid totaled 259,092 pounds and were valued at $85,292 and dutied at $15,541. Shipping here were: Spain 215,000 pounds, valued at $71,291 and dutied at $12,898; Italy 31,967 pounds, valued at $9,977, and dutied at $1,916; and France 12,125 pounds, valued at $4,024, and dutied at $727.

Cream of tartar imports in June were 316,800 pounds, valued at $84,949 and dutied at $9,897. Suppliers were: Italy 174,163 pounds, valued at $44,786 and dutied at $5,441; United Kingdom 125,000 pounds, valued at $35,714 and dutied at $3,906; The Netherlands 11,023 pounds, valued at $2,740 and dutied at $344; and West Germany 6,614 pounds, valued at $1,709 and dutied at $206.

Imports of argols in June were 11,023 pounds, valued at $979.

Tranquilizers — Tranquilizers were turned out by US manufacturers last year to the tune of 244,000 pounds. As this figure applies only to bulk materials, it is not surprising that only 21,000 pounds of the total was sold on the open market. These sales were valued at $626,000, for an average price of $29.81 a pound.

Botanicals

The market has been seasonally quiet for the past several weeks but with the fall rapidly approaching and increased pharmaceutical and industrial activity expected, an upturn in demands is imminent.

On the price front, status quo is the word. Throughout the past several months, only a few changes have been noted and these for the usual reasons —new crop arrivals, shortages.

The waning interest in tonka beans, a source of coumarin which has been banned by the FDA for use in foods, points up the increasing problem of government restrictions faced by botanicals and essential oils.

Chamomile Flowers—Hungarian flowers are amply available at prices ranging from 90c. to $1 a pound. The Roman variety, however, are commanding a premium; dealers here are asking $1.50 to $1.75. Price could come down with receipt of new crops.

Colchicum Root—Quote was recently advanced to 35c. to 45c. a pound, last week's level. The seed, quoted as high as $1.25 a pound last winter, is now listed at 75c. to 80c.

Water Soluble Gums—The following information is reported by Business & Defense Services Administration of the Commerce department.

Imports of gum arabic in January-March 1960 decreased 43 percent compared with the same period in 1959. Three countries were shippers for the first time: Italy, 4,500 pounds; France, 11,023 pounds, and Peru, 4,409 pounds.

Imports of arabic from Italy may have been transhipments from Somalia or Sudan, and those from France may have originated in a colony or former colony; the Peruvian shipment cannot be explained, however, because Peru is not known to be a producer.

Arrivals of tragacanth and karaya in the first quarter of '60 were average, tragacanth was up 7.1 percent and karaya down 1.5 percent from the like period in 1959. The Sudan made karaya shipments to the US in nominal amounts compared to total imports, in January and March 1960 and in October 1959. It made none in 1958. Past statistics give no indication that the Sudan's karaya shipments will increase or be steady.

OPD Reports From Europe

Election in US: Europeans Unhappy

—*Continued from page 5*

Mr. Hayes as saying that it isn't "always easy to maintain a liberal position" in the union, adding "we receive from our locals many motions asking that we take a position in favor of raising customs duties on certain products."

Continental "realists" expect that such powerful unions as the steel workers, textile workers and auto workers may soon be forced by their membership to come out for protection. To these observers, such a labor union move would take care of the Democratic Party and its platform of continued low trade barriers.

Sharp reductions in US imports of steel since the long strike was settled and of cars since the introduction of the compacts may have decreased the sensitiviy of steel and auto workers to the import argument.

Republican 'Protectionist Policy'

On the Republican side, Europeans point to indications that the US Chamber of Commerce may be moving toward a stronger protectionist policy and to the Nationwide Committee on Import-Export Policy, which is sometimes described as a "very powerful lobby" for protectionism.

Since the members of the Chamber of Commerce are credited in Europe with being the major financial supporters of the Republican Party, this is believed to take care of the Republicans and free trade.

After a gloomy survey of this type, one Frenchman comments, "The danger is not negligible." Danger, of course, to European exports in the US market.

It should be noted that Europeans tend to take the statements of American industrial and labor organizations at face value and assume that such resolutions from organizations commit their memberships in some fairly definite political sense. A partial reason for this is that many European and British trade organizations do have financial, economic and policy power far beyond the average in America.

The key to the US situation for these European observers is pressure against imports into America, of textiles and textile products from Japan. For in this area, the unions have started taking fairly strong positions and one union has been reported in Europe as considering a campaign to boycott Japanese textile products.

Stevens' Words Widely Circulated

The statement by Robert Stevens, president of J. P. Stevens & Co. and former Secretary of the Army, that the US must decide whether or not it considers its "textile industry superfluous" has been given wide European circulation.

It is the opinion in Europe that if the US government resists the pressure to keep out Japanese textile products, then all exports to America will be safe for the time being. A US move to bar Japanese textiles, though, would be seen as only the first step, with other nations and industries affected later.

Attempts by US unions to set in motion an equalization of wages in western countries, needless to say, does not strike Europe's businessmen as attractive. They also believe that all western countries will face serious trade problems as the underdeveloped nations begin to increase their exports and densely populated countries such as Japan step up their industrialization.

Jobs & People

Chemstrand Corporation, New York—**Charles Brent Holleran,** director of the company's legal department, has been elected assistant secretary of the board of directors. He will continue in his legal department post.

Dodge & Olcott, Inc., New York—**John J. Thompson,** D&O vice-president, has been elected associate director of the Toilet Goods Manufacturers Associatio: of Canada.

Dow Chemical Company, Midland, Mich.—**Dr. Turner Alfrey, jr.,** has resigned as director of the polymer research laboratory to assume the rank of research scientist with Dow.

General Dynamics Corporation, New York—**C. Rhoades MacBride** and **W. P. Gullander** have been elected to the board of directors.

Harchem Division of Wallace & Tiernan, Inc., Belleville, N. J. — **Wallace E. Riffelmacher** has been transferred from sales to the product development department as assistant to the product development manager.

Hooker Chemical Corporation, Niagara Falls, N. Y.—**Dr. Thonet C. Dauphine,** a member of the general development staff, has been appointed senior development engineer. **Alexander D. Kischitz,** also a staff member, has been made supervisor of commercial research.

International Minerals & Chemical Corporation, Skokie, Ill.—**Dr. Allen T. Cole** has been appointed property manager for Florida and Tennessee phosphate operations.

Nalco Chemical Company, Chicago —**John B. Cruell** has been named manager of the southern California district headquarters of the industrial division.

SunOlin Chemical Company, Philadelphia—**Ernest Artz** has joined the company as a process engineering assistant.

E. R. Squibb & Sons, a division of Olin Mathieson Chemical Corporation, New York—**Donald R. Creagan** has been named a product sales manager in the sales promotion department.

Union Carbide Plastics Company, New York, a division of Union Carbide Corporation—**B. E. Godard** has been appointed an assistant market manager.

United States Borax & Chemical Corporation, Los Angeles—**John T. Young** has been named to the newly-created post of engineering manager of the Wilmington, Calif., refinery. **Charles Lester Friedmann** has joined the company as a senior process engineer at Boron, Calif.

US Industrial Chemicals Company, a division of National Distillers & Chemical Corporation, New York — **William F. McDonald** has been advanced to manager of customer services, and **Gerald M. Platz** to manager of plant services.

Vitro Laboratories, a division of Vitro Corporation of America, West Orange, N. J.—**Dr. Stanley Grand** has been appointed chief of the chemistry and arc research department.

Wallerstein Company, Staten Island, N. Y., a division of Baxter Laboratories—**Leonard Barmak** has been appointed sales representative for the pharmaceutical division.

Whitehall Laboratories, New York, a division of American Home Products Corporation—**Jack Finn** has been named executive vice-president.

Wyandotte Chemicals Corporation, Wyandotte, Mich. — **Lewis C. Reid** has been appointed general manager of Wyandotte Chemicals International and assistant to the general manager of exports in the Michigan Alkali Division.

Pharmacy Organization Man Is Ending a 20-Year Career

Dr. Justin L. Powers, director of the National Formulary and editor of the scientific edition of the *Journal* of the American Pharmaceutical Association, will retire October 1 after more than twenty years of service with the pharmacy organization.

He will be succeeded by Dr. Edward G. Feldmann, who has been serving as associate to Dr. Powers in these twin posts for the past year.

Dr. Powers became chairman of the committee on the National Formulary in 1940 after a long career on the pharmacy school faculties of Washington State College, Oregon State College and the University of Michigan.

Dr. Feldmann was senior chemist in the division of chemistry of the American Dental Association and served as director of that unit from 1958 until he joined APhA.

Union Carbide Starts Up New "Ucar Hexa" Facility

Union Carbide Chemicals Company has begun commercial production of hexamethylenetetramine. The material will be available from the Union Carbide Corporation division under the tradename "Ucar Hexa." Commercially, it is a convenient, low-odor source of anhydrous formaldehyde.

"Ucar Hexa" is manufactured in four grades: powder or crystalline and with or without free-flow agent. Carload or truckload lots, in multiwall bags, for all four grades are priced at 23.3 cents a pound.

The widest use of hexamethylenetetramine, Carbide says, is as a cross-linking agent in resins to make dry mixes for molding, fiber-bonding, grinding-wheel, and foundry applications.

Aetna Has New Product List

Aetna Chemical Corporation, East Paterson, N.J., chemical distributors, has just issued a revised product brochure following its recent removal to new quarters. 40,000 square feet as against 15,000 at its old location. Among products distributed by Aetna are acids, solvents, ammonia liquor and caustic soda.

The firm's new facilities comprise some

Shell Introducing Solvents

—*Continued from page 5*

coalescing agents in emulsion (water-based) paints.

Tests still continuing at the company's technical services laboratory in Union, N.J., are being pointed toward new uses outside the surface coatings field, such as in plasticizers, polishes and cleaning compounds. Great potential is said to lie in the textile industry where the solvents could be used in dyeing and dyestuff printing or as penetrants in sizing and mercerization.

In addition, "Pent-Oxol" is said to show exceptional properties as a frothing agent in the mining industry. In the flotation of coal and of a copper mineral it appears to be more selective than pine oil, which is regarded as standard, the company says.

Researching of the new products was first undertaken at Shell Development Company's research center in Emeryville, Calif. The final manufacturing process, which is said to differ substantially from methods used to make other commercially available solvents, was perfected at the company's plant in Martinez, Calif, which is now ready to begin full scale commercial production.

FDA Has Spending Money

—*Continued from page 3*

ferees to appropriate $4,354,000,000 for the Department of Health, Education & Welfare; the Department of Labor and other agencies for fiscal 1961.

The final bill is a compromise between a senate measure calling for $4,484,000,000 and house legislation providing for $300 million less.

What Mr. Eisenhowever will do is a question. Some White House sources indicate that the President will veto any bill providing more than $500 million for NIH, but the consensus on Capitol Hill is that he will sign the measure.

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Essential Oils, Aromatics

One advance and two declines featured the activity in essential oils last week. Grapefruit price surged 25 cents to an eight year high of $4.75 a pound. Dealers reported material is scarce and demand is high. Geranium declined 50 cents to $28 following on the heels of a $1.50 drop the week before. New shipments have loosened the market somewhat, it is reported. Little buying interest is being exhibited in geranium currently due to what is described as an inflationary price structure. Some dealers are refusing to stock material, therefore, knowing that buyers are reluctant to enter the market at present price levels.

Dillweed spot price hit $4.25 on reports of scarce new crop. Old crop continues at lower levels.

Brazilian bois de rose is reported to be scarce at source and Formosan citronella is also short due to damage caused by storms earlier in the month. Sandalwood is unchanged since the $1 increase fortnight ago.

Vanilla beans, quiet in recent months, erupted last week as bourbon and Mexican cuts material each declined 50 cents to $10.75 and $11 respectively. Mexican whole continued unchanged at $12. Reason for sudden activity is that new crop shipment time is imminent and dealers are anxious to dispose of material presently on hand.

News from the Malagasy Republic, formerly Madagascar, is that the government has rejected a proposal to set price and export controls on vanilla. Instead, an export tax has been posted.

Under consideration by the *Caisse de Stabilisation de Vanille* (Vanilla Stabilization Commission) was the proposal to create a floor price for vanilla of $20 a kilo, f.o.b., and an annual export quota of 450 tons.

The commission has, however, levied a 60-cents-per-kilo export tax on the 1960 crop. Material will begin being marketed January 1, 1961.

Rejection of government controls and the new tax levy are important to market considerations in view of the fact that the island republic is the source of 80 percent of the world's supply of vanilla.

Recent reports from Great Britain reveal that the Government of the People's Republic of Bulgaria has deposited 1,100 pounds of attar of roses in a London bank as financial security.

Described by Bulgarian officials as a normal trade practice the material, recently quoted on the London market at 380 pounds sterling a pound, or $1,104 American, is reportedly being deposited in lieu of gold as a result of an imbalance of Bulgaria's trade with Great Britain. Indeed, considering the world price of gold, attar of roses at its present level is truly worth more than the precious metal.

The following is information from government publications:

Certain temporary tariff reductions effective July 1 have been announced by the Norwegian Ministry of Finance and Customs, as a result of Norway's participation in the European Free Trade Area.

Of particular interest to United States exporters of fruit juices is the reduction in the import duty on prune juice, pineapple juice, peach juice, apricot juice, and mixtures thereof from 2.00 crowns per kilogram to 0.60 crown per kilogram (crown equals $0.141).

Among the other changes which may be of interest to United States exporters is the removal of the import duty on fresh and dried citrus fruit; raisins, currants, dried apricots and dried prunes. (This information was supplied to the government by the United States Embassy in Oslo.)

The following item, from government sources, may be of interest to persons interested in hair preparations.

A manufacturer in Tangier, who has a new hair lotion process, offers the product to a United States firm for exclusive distribution throughout the country.

Price Trends

Advanced
Grapefruit, 25c. per lb.

Reduced
Geranium, Bourbon, 50c. per lb.
Vanilla beans, Bourbon, 50c. per lb.
Mexican, same basis, 50c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
145.97	145.99	146.14	147.43

For Current Prices see Page 10

Described as a modern process of restoring gray hair to its natural color, the lotion also is beneficial to the hair in that it eliminates dandruff and leaves the hair soft.

Its tonic properties reportedly are made up of herbal ingredients. The lotion is said to be simple to apply and has been sold successfully on the Moroccan, Spanish, and other markets.

Literature describing the product is available on loan from the Trade Development Division of the Bureau of Foreign Commerce, U. S. Department of Commerce, Washington 25, D. C.

Essential Oils

Bois de Rose—News received in New York last week indicated Brazilian rosewood is not being collected in as large amounts as predicted before the gathering season.

A word on the methods employed by the Brazilian industry is necessary to fully understand the situation.

Rosewood trees grow wild in high elevations along the right bank of the upper Amazon. The logs when cut must be floated down tributaries of the Amazon to the river itself where they are loaded on barges and sent to the distilleries. This is only possible during the period April to July when the Amazon and its tributaries are at flood levels. Most distillers do not maintain their own woodcutting teams due to the seasonal nature of the work. Experienced bands of natives are hired, equipped and financed at the beginning of each season by the distillers for the perilous task of penetrating the jungle. This year, however, other products such as jute and brazil nuts have been bringing higher prices to the woodcutters than rosewood. Consequently the trained teams are concentrating their efforts on the more lucrative materials and disregarding to a large extent the collection of rosewood.

Brazilian bois de rose has been taking second place to Peruvian material on a cost basis for some time now, a differential of 50c. a pound being in existence. Sources in New York claim that the expected decline in Brazilian supply will have little effect in the US unless Peruvian material should become scarce and reach a point where US buyers must inquire into the Brazilian market for large amounts.

Citronella — Offerings are reported scarce from Formosa, due in large part to the disastrous typhoon which struck the island early in August.

As yet no advance have been reported. Formosan material continues at 92c. while Ceylonese material is quoted at $1, its previous level.

Dillweed—New crop material is reported very scarce and prices are moving up accordingly.

New crop material is quoted at $4.25, the highest price recorded in OPD's Hi-Lo price index since 1954 when material commanded 5c. more than current price.

Geranium—Bourbon material declined 50c. a pound to $28 last week. This marks the second week in a row in which a drop has been noted. Two weeks ago bourbon was quoted at $30.

Reason for continued decline from record high levels is two-fold. For one, more material is said to be coming on the market causing a more competitive situation. For another, the recent high prices have kept buyers out of the market and dealers report difficulties in interesting purchasers at contemporary prices. Some dealers have expressed little interest in

—Continued on page 50

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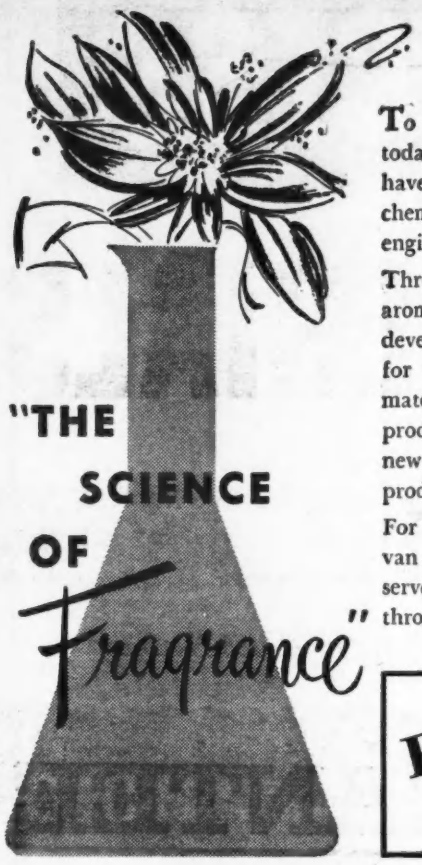

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Essential Oils

—Continued from page 48

carrying material until they are able to offer what they term a more realistic quotation.

Of interest is the derivation of the word bourbon in describing certain oil of geranium material. As is known bourbon material is from the island of Reunion in the Indian Ocean. Originally the island bore the name Bourbon in honor of the aristocratic French family which founded dynasties in France, Spain and Naples. Among other items given the name bourbon are a rose, a whiskey, a variety of cotton, a brand of political conservatism, the white lilly, a fan palm, a tea and a turkey.

Grapefruit—The firm nature of market conditions for this oil was again confirmed last week when prices rose another 25c. to $4.50.

For the second consecutive week grapefruit set a record high price for a span covering the last eight years.

Whether this trend will continue is strictly a matter of supply. Dealers report little or no supply available, hence the upsurge in quotes.

Lemongrass—Price dipped fractionally lower to $1.95 last week in an effort to spur lagging business. Result was some activity by importers and reports of activity in European markets.

Orange—Material is moving at following prices: California, expressed, USP, 70 to 90c. per pound; California, sweet distilled, 60c. per pound; Messina, $3.25 to $5 per pound, and West Indian, bitter, $2.50 to $3.25.

Peppermint—A tendency to firmness in the market is noted due to belief by dealers of reports of a smaller crop than usual.

Prices have edged up for both redistilled and natural, but remain within the quoted price spread.

Sandalwood—After the $1 increase to $21 two weeks ago, sandalwood remained strong last week on the basis of tight supply and word that future shipments are uncertain as to size.

Spearmint—Indications are that reports of plentiful material at source will have the effect of driving current prices down. Quotations of $4.50 for new material appears to be the approximate level at which offerings will be moved in contrast to the $8 figure in vogue recently.

Seeds and Spices

Laurel Leaves—Turkish material is reported scarce and new crop is not expected to be shipped until late this month or September. Turkish material, spot, is quoted at 20c. while new crop, steamer, is 16c.

Marjoram—French crop is reported smaller than last year's as an early Spring drought slowed production. Expectations are that higher prices will prevail at the end of the selling season. Currently, French, triple-sifted, is quoted at 31c.

Nutmegs—East Indian spot stocks are indicated to be small. West Indian material is reported to be offered at attractive rates.

East Indian spot prices are quoted at $1.34 to $1.35 down one to two cents from the previous listing.

West Indian prices for whole are $1.28 to $1.29, again down 1c. to 2c.

Pepper—Prices declined abruptly as competitive Indian material began being diverted from European markets to US ports. Malabar and Lampong declined from 58½c. to 56c. while Brazilian and Ceylonese shipments were quoted at 55c.

Muntok white decline a cent to 83c. and Brazilian was qouted at 82c.

Lampong black pepper is perhaps the variety of greatest quantity to be found in world markets. Originating in the Lampong district of Sumatra it is also raised extensively throughout the islands comprising the old Dutch West Indies, now the Republic of Indonesia. On the island of Banka, off the coasts of Sumatra in Indonesia, is found the growing areas for muntok white pepper. Malabar pepper is native to the coasts of southern India.

Thyme Leaves—New French crop is available on spot. Quotations continue unchanged at 25c. for French triple-sifted and .09c. for Spanish.

Vanilla Beans—Interest was generated in the market last week to a degree unexperienced in some months past. Declines featured the activity as dealers attempted to unload current stocks before the arrival of new crop material.

Bourbon material, tins, declined 50c. to $10.75 a pound. Mexican cuts, tins, shared the half-dollar reduction dropping to $11. Mexican whole was unchanged at $12.

Olin Financing Company Wins an SEC Exemption

Securities & Exchange Commission has conditionally exempted Olin Mathieson Ship Financing Corporation, New York, from the investment company act.

The financing corporation is a subsidiary of Olin Mathieson Shipping Corporation, a Liberian corporation, all of whose stock is owned by a Panamanian company whose stock in turn is owned by Olin Mathieson Chemical Corporation of New York.

Olin Mathieson Chemical has participated in the formation of a Guinea corporation called Fria, Campagnie Internationale pour la Production de l'Alumine for the purpose of mining bauxite in Guinea.

The bauxite will be refined into alumina for shipment to the founding shareholders of Fria, a group consisting of Olin Mathieson Chemical and French, Swiss and British aluminum companies.

The shipping corporation has entered into a construction contract with an Italian yard for the construction of a combination vessel and will borrow the required funds from the financing corporation, which in turn will obtain the funds for the loan by the issuance of $9.5 million in bonds to the Prudential Insurance Company of America.

Aluminum Industry

—Continued from page 3

tegic Materials Company, New York, based on ideas of the late Dr. Marvin J. Udy.

Construction will start in February on North American's first chemical venture, and President Henry G. Schmidt expects to have the sulfate plant in operation around June 1.

First part of the alumina process—the aluminum sulfate plant — is thoroughly proven out, Mr. Schmidt told OPD last week. The second stage involving the decomposition of sulfate to alumina is being piloted at a unit in Niagara Falls, N. Y.

Beauty of the Powhatan location is the virtually unlimited supply of coal mine waste, which will cost North American nothing, and the easy accessibility of coal for cheap power, Mr. Schmidt contends.

(Average value of bauxite as shipped and delivered to the domestic alumina plants in 1959 was estimated by the Bureau of Mines at $17.30 per long ton, dry equivalent, for imported ore).

Mr. Schmidt says the primary objective of his new company's new venture is to produce aluminum oxide of metallurgical grade—and perhaps aluminum metal, although the latter goal is rather nebulous at present.

Ormet Corporation's 180,000-ton-a-year aluminum metal plant is at Clarington, Ohio, only about five miles from Powhatan, he points out. Also not too far away: Kaiser Aluminum & Chemical Corporation's 145,000-ton plant at Ravenswood, W. Va.

Mr. Schmidt is confident that some current economic kinks will be worked out of the second stage of the alumina process, and that it will be "entirely competitive" when it is ready to go commercial.

Pesticides Study

—Continued from page 4

pressing need for such pesticides in the control of the grasshopepr, Japanese beetle, and elm bark beetle.

Work has been initiated to evaluate new chemicals used in gypsy moth and grasshopper control and the service is joining in cooperative studies on special baits for fire ant control.

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Petroleum Derivatives

With current industrial production operating at reduced rates in several critical areas, segments of the petroleum derivatives market are being affected accordingly. Hardgoods have been plagued by slow sales and high inventory all year, resulting in plant shutdowns and reduced production schedules in appliance lines. Solvent sales to metal finishing industries have thus been lower than expected. Toluene is moving well on the basis of use in gasoline and aviation gas. Benzene remains tight and in high demand. Talk in the trade is that fourth quarter benzene price will return to the level held before July, 1958 which was 2 cents above current contract price.

Demand for crude oil and gasoline will decline in September, according to a Bureau of Mines forecast. The Bureau estimates that 6,980 million barrels daily will be consumed or exported in September as compared with a forecast of 7,125 million barrels daily in August. Gasoline demand predicted for September is 4,395 million barrels daily, or 0.2 percent below the same month a year ago. Latest reports indicate gasoline stocks at the end of July were 8 million barrels higher than a year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
103.74	103.74	103.74	104.42

For Current Prices see Page 10

Aromatic Solvents

Benzene—A tight supply situation continues unchanged from previous reports.

Current demand for benzene remains strong both in domestic and export areas of the market. Contract price is firm at 34c. a gallon while spot and export prices are ranging higher when material is available.

Rumors and predictions of a fourth quarter price increase persist far above the strength of such indications which preceded the third quarter announcement date.

Oil companies are confirming estimates of an expanding benzene market by heavily investing in increased production facilities. In the last month alone the following was reportsd in OPD:

- A "Udex" plant with 30 million gallon annual capacity was slated for a Texas location.
- The world's first "Hydeal" unit was started up near Beaumont, Tex. Capacity —4.5 million gallons annually.
- A Houston refiner is in the process of installing a "Hydeal" unit which will double the plant's benzene capacity to 21 million gallons annually.

The capacity race among oil companies is attributable to several factors. One, of course, is the expanding styrene and synthetic phenol market. Another is the possibility within the next twenty years of new steel production techniques which may tend to reduce coke output and by-products such as BTX. Even without a change in steel production methods, oil men have taken careful note of various factors which cause a fluctuating benzene supply from cokeoven sources—steel rate, strikes and the like—and have decided to be on hand with enough material at all times to capture the market. The only question arising in the minds of some trade observers is whether benzene production capacity will come on stream in excess of projected demand. From the current short supply, a long supply situation may then tend to occur if all the planned and considered plants do come on stream in the next few years.

Toluene—This solvent continues to show a firmer posture than that exhibited earlier in the year.

All major applications are at peak volume save that of pesticides.

Motor fuel and aviation gasoline together account for nearly half of all toluene consumption and this is the season in which highway and air travel reach the year's peak. Bureau of Mines forecast shows that gasoline demand will continue well sustained into September with only a 0.2 percent decline in demand. The tourist season has also pressed piston aircraft into service to augment jet passenger planes with the result that aviation gas demand is on the upswing. This should continue until October, the traditional end of heavy air travel for the year.

Heavy spot demand is usually noted around the holiday seasons of Thanksgiving and Christmas, but nothing like the sustained heavy schedules being maintained at present.

Price continues firm at 25c. a gallon, delivered east of Rockies.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Aug. 13 totaled 238,679,000 barrels, the lowest since Feb. 24, 1951, according to data reported by the Bureau of Mines. Compared with the total of 241,163,000 barrels the preceding week, this represents a decrease of 2,484,000 barrels, comprising a decrease of 2,703,000 barrels in stocks of domestic crude and an increase of 219,000 barrels in stock of foreign crude.

Aliphatic Solvents

Paint sales continue to climb with each set of annual figures indicating new volume records. Sharing in this prosperity through the sales of thinner for oil-based paints has been the petroleum industry. However, the phenomenal rise of water-based paints has in recent years proportionally outstripped the growth of oil-based paints, causing concern for manufacturers of thinners. Trade observers now feel that water-based paints have about achieved their share of the market and that future growth will be in line with the general advance rather than at an accelerated rate as in the past. If this opinion is confirmed by sales statistics in the next few years it augers well for oil-based paints and the petroleum industry in general.

Hexane—Extraction of oil from soya beans is reported to be in full production. Oil is still being extracted from the last crop and harvest of new produce is almost at hand. Consequently sales of solvent for extraction purposes in this particular area is well sustained. Other segments of the vegetable oil extraction industry are reported down and tending to wait the outcome of definitive political farm programs before revealing the timing and volume of crushing.

Hexane in tankcars, New York and New Jersey is currently 20c. a gallon, while Houston, same basis, is 16c. a gallon.

LPG's

Butane—Production in the period July 16-31 was 84,744,000 gallons, an increase of 11,158,000 gallons from the previous two week period, and an increase of 4,513,000 gallons from the equivalent period last year.

Stocks as of July 31 were 363,114,000 gallons, an increase of 20,244,000 gallons from July 15, and an increase of 129,128,000 million gallons from July 31 last 000 gallons from July 31 last year.

Ethane-ethylene—Production in the period July 16 to 30 totaled 2[illegible]245,000 gallons produced in the same period last year.

Stocks as of July 31 were 913,000 gallons, the same figure registered on the same date last year and on July 15 this year.

Propane—Production during the last two weeks of July totaled 148,950,000 gallons, an increase of 6,237,000 gallons from the previous two week figure.

Stocks on July 31 were recorded at 614,809,000 gallons as compared with 570,613,000 gallons on July 15.

Miscellaneous

Crude runs to stills for the week ended Aug. 19 averaged 8,135,000 barrels daily, of which 1,061,000 barrels were foreign crude runs. This is a decline of an average of 200,000 barrels daily from the previous week. Refinery operations were reported to be 83.1 percent for the week ended Aug. 19 as against 85.2 percent for the previous week.

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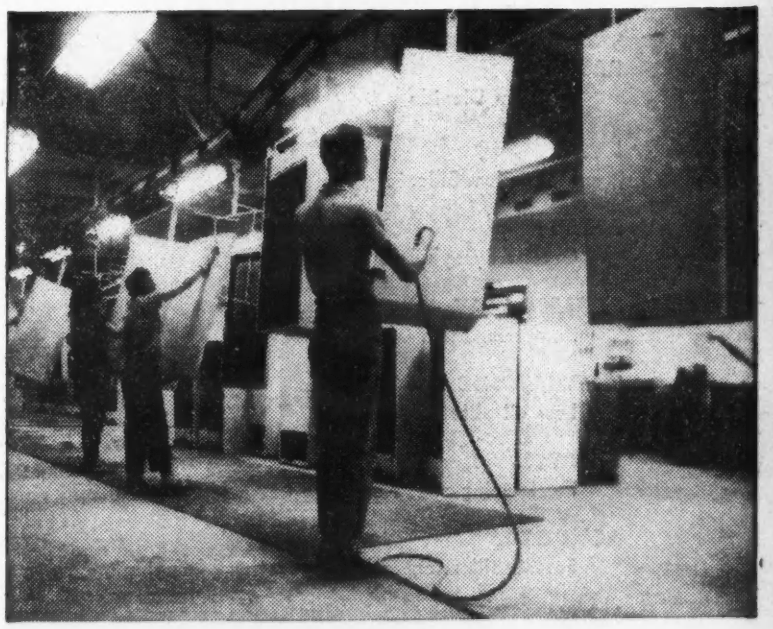

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Coatings Materials

As the coatings market goes into its fourth straight week of late summer doldrums, marketing men are beginning to wonder if it will ever shake that old ennui. The reports from all quarters of the market indicate routine business conditions, but many in the trade feel that things are too quiet. With the new models being prepared in Detroit, and steel operating at slightly more than half of its capacity, the consensus is that the lag in business activity will continue on into September.

Cokeoven naphthalene should be flowing freely about a month after steel production gets back into high gear. With naphthalene supplies tight at the present time, the phthalate esters and alkyd resins still are supply problems for producers.

Some of the organic pigments based on naphthalene derivatives have escaped the shortage of naphthalene, but this may be the result of decreased demand rather than adequate sources of supply.

Other potentially problematic trouble spots are in regard to raw materials coming from the Congo. Although no supply problem exists in relation to cobalt oxide or certain grades of gums, the situation in the Congo could flare up to the point where shipments could be interrupted. Supplies of both items here are reported to be in good balance, and with the Congolese anxious for American dollars, no difficulty is anticipated.

The casein market was slightly more active last week than has been the case in previous weeks. Generally, buying interest was at best routine. Nominal quotations for Argentine were in the range of 20 cents per pound for shipment, while Polish continued at about a ¼ cent per pound lower. Some indications of increased production in the Argentine were noted, but stocks were reported to be at fairly low levels.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 30, 1959
103.16	103.16	103.16	103.03

For Current Prices see Page 10

Prime Pigments

Barium Chromate—Price holds at its longstanding listing of 38c. per pound. Demand is reported to be slow for this speciality paint item.

Carbon Black—Production of carbon black in July was 2.4 percent above July 1959, according to the Bureau of Mines. Shipments decreased 17.1 percent from July a year ago. Stocks increased nearly 23 million pounds in July.

Production of furnace carbon black in July was 148,628,000 pounds. Channel output for the same month was 23,926,000 pounds for a total of 172,556,000 pounds.

Shipments of channel black in July totaled 20,258,000 pounds, while furnace carbon black moved at the rate of 129,525,000 pounds. Total shipments were 149,783,000 pounds for the month.

Stocks of channel black were estimated to be at 262,266,000 pounds, of which 193,152,000 pounds were furnace and 69,114,000 pounds were channel carbon black.

Exports of carbon black in June totaled 40,845,000 pounds, as against 42,610 pounds for the previous month. The cumulative total for January-June exports of this year show exports were 38 million pounds greater than the same period last year. For the period January-June of this year exports totaled 278,063,000 pounds. Last year for the same months exports were made at the rate of 239,403,000 pounds.

Cobalt Oxide—The varied industries that consume cobalt oxide are reported to be calling for the material in normal quantities. Biggest use is in porcelain enamel finishing where the oxide is used as a first coat. Pigment uses include glass ware and ceramics.

Shipments of raw material from the Congo is reported to be moving without difficulty. Since the Congo only supplies the raw material (the actual refining is done in Belgium), most trade sources feel somewhat secure that shipments of the oxide will continue without interruption. However, should relations between the Congo and Belgium worsen, the supply situation could change rapidly. For this reason, trade sources are keeping their fingers crossed.

Prices for cobalt oxide remain $1.15 per pound for cobalt oxide, 72½ percent to 73½ percent ceramic grade, kgs., dlvd. E. of the Mississippi and $1.12 per pound for 70 to 71 percent Co., same basis.

Hansa Yellow—New light resistant pigments have been recently developed by a leading pigment producer. According to the producer, the three new pigments provide improved durability which fill the need for more light resistant hansa yellows created by the increased use of latex paints in exterior applications. The producer claims that chrome yellows are not bright enough and contain lead; vat yellows are too expensive; and conventional hansa yellows are not light resistant enough. No price schedule for the new pigments has been released by the developer.

Titanium Pigments—Along with other paint materials caught in the routine market conditions, demand for this pigment is termed fair. Supplies are reported to be adequate, prices are unchanged.

Zinc Oxide—With the auto makers still making the changeover to the new models, demand for zinc oxide from that quarter is expected to pick up shortly. Other paint uses for the oxide are reported to be off from their usual levels bringing demand to a routine pace.

Lacquer Materials

Plasticizers—No change in the supply position of the phthalates is reported for the week. Market for the phthalates continues to be active with considerable maneuvering on the part of consumers to obtain material for their needs. Over the past month, producers are reported to have been doing business strictly for their regular customers. Very little new business is being sought by producers at this time.

Triethyl Phosphate—The listings for this plasticizer hold at their previously established listings. For triethyl phosphate, drums, c.l., dlvd., the price is 40½c. per pound. Drums, l.c.l., dlvd., listing calls for 42c. per pound, while tanks, dlvd., is 38c. per pound.

Natural Resins

Gums—With the situation in the Congo showing little sign of immediate improvement, producers are happy to report that shipments from the Congo are arriving in this country on schedule. Even without regular shipments, suppliers here are confident that the ample stocks on hand of the copal gums would carry them through any temporary halt in the movement of supplies. Listings that have been effective over the past few months are reported to be unchanged.

Shellac—A return to the pre-summer levels of activity is about due in this market. Right now the market is still at routine levels, with supplies at both primary and secondary sources reported in good balance. Listings are holding firmly at their previously established levels.

Naval Stores

July production of gum naval stores was reported at 15,670 barrels of turpentine and 45,440 drums of rosin, according to the Crop Reoprt Board. Production for the crop season to date is 5 percent above the same period last year. Wood turpentine output was down 3,940 barrels from the previous month. Steam distilled rosin production of 101,720 drums dropped to its normal level from last month's high of 107,040 drums and tall oil rosin output of 27,640 drums was 10,180 drums under June's figure—the lowest since December 1958. Total rosin production for the April-July period this year was 684,320 drums and compares with 647,890 drums for the same months last season.

Gum turpentine stocks were up about 8,600 barrels from June 30, while wood turpentine stocks decreased 5,900 barrels. Gum and wood rosin stocks were up 6,230

Coatings Materials

and 5,000 drums, respectively, with a total of 127,130 drums on July 31.

Pine Gum—For the week ended August 19, the average price paid er gallonp of turpentine was 45 4/10c. The average price said producers for commercial pine gum was $41.10 per barrel. Receipts of 19,400 barrels were 620 more than the same week last year.

Weekly weighted averages were: WW $17; WG $16.94; N $15; with no averages reported for M or K.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Aug. 19	Mon. Aug. 22	Tues. Aug. 23	Wed. Aug. 24	Thurs. Aug. 25
Drums—					
G	...	...	...	...	$16.50
K	...	...	...	...	16.50
M	...	...	$16.50	...	...
WG	$16.85	...	...	...	...
WW	17.00	...	...	...	17.00
Bags—					
G	...	...	...	...	16.50
WW	17.00	...	...	...	...

Tankcars (for week ended Aug. 26)— WG, $16; N, $15.75

Sales, USDA

6‡	...	1‡	... 4‡

New York

(Per 100 lbs., c.l., Friday)

WW, $18.25; WG, $18.10; N, $17.85; K-M, $17.75

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.45¼§	...	...	...	.45 5/10
Sales	16,000¶	...	...	...	6,000¶

‡ Carlots. ¶ Gallons. § Average price.

Fillers and Inerts

Cashewnut Liquid—The cashewnut, long thought of as an item sold along with other penny candies, has over the years carved a niche for itself in the automobile industry. When treated, the cashewnut shell has excellent friction characteristics. This property enables it to be used in the linings of automobile brakes. It is reported that almost 80 percent of the treated cashewnut shell output is consumed by the auto makers.

Over the years, producers report, the demand for the red nut has been generally good. Even today demand from the auto makers, despite the production slowdown for new models, is reported to be about average. Prices have been steady, with no changes reported. For cashewnut shell, liquid, treated, packed in drums, c.l., Newark, N.J., the price is 24c. per pound. For material in ton lots, same basis, the price is 25c. per pound. Material in tankwagons is 22½c. per pound.

Miscellaneous

Casein—The market for Argentine casein continues to be quiet. Lessening interest continued to be the main feature of the market for the week. Listings for Argentine material were reported to be around 20c. per pound for shipment. Stocks of casein in the Argentine are reported to be at low levels, but one report indicates that production will be increased.

Polish casein, while offered at ½c. per pound cheaper than Argentine, did not awaken the lagging market. A report that Polish would be offered at substantially lower prices than the Argentine found no backers among trade sources.

In line with the slow market this month, interest in French casein was reported to be very slight.

A low cost, technical grade of enxyme hydrolyzed casein has been put on the market. The producer describes his new product as containing more than 13 percent total nitrogen of which at least 30 percent is amino nitrogen. It is a water soluble powder packed in 100 lb. drums with polyethylene liners. It can be used as a microbiological nutrient in the fermentation industry, as well as in pesticides and agricultural formulations and as a chemical intermediary in many processes.

Chlorinated Paraffin—Some new uses for chlorinated paraffin are beginning to widen what was until a few years ago, a fairly restricted market picture. Traditionally, chlorinated paraffin was used as fire-proofing material for textiles and in the manufacture of high pressure lubricants. Now, producers are pushing chlorinated paraffin as a secondary plasticizer and a formulation for fire-retardant paint. The specifications for the paint have been sent to the government for approval and the producers are confident of its ultimate acceptance. The paint is reported to provide excellent fire-retardant properties on a variety of surfaces, including such previously difficult surfaces to cover as interior walls and shingles.

The use of chlorinated paraffin as a secondary plasticizer is attracting interest as a result of the shortage of the phthalate esters. More consumers are apparently willing to try the new item, but the producers see a big job ahead of them in "educating" the industry as to the advantages of chlorinated paraffin in this area. Since the material is 3c. to 7c. per pound cheaper than the phthalates, producers are hopeful that with this price advantage they will be able to pry a corner of the plasticizer market away from its traditional suppliers.

Prices for chlorinated paraffin are reported to be unchanged. Chlorinated paraffin, 40 percent, drums, c.l., frt. alld., is in the range of 15c. to 17c. per pound.

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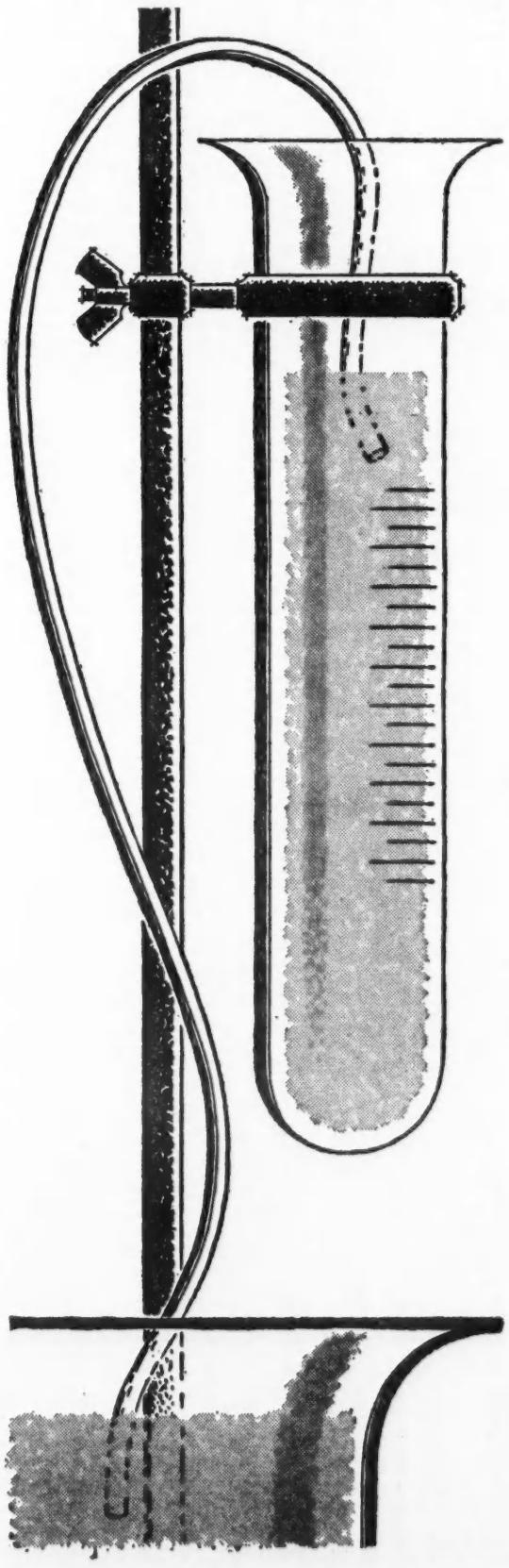

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ALOE—52 cs, Meer Corp, Aruba
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P-AMINOSALICYLIC ACID—38 dms., Gyma Lab, Antwerp
AMMONIUM THIOSULFATE—173 dms, Interstate Universal Inc, Rotterdam
ANILINE DYES—6 dms, H Bruckmann & Lorbacher, Rotterdam
56 dms, H Bruckmann & Lorbacher, Hamburg
69 dms, Sandoz Inc, Havre
63 dms, Geigy Chemical Corp, Havre
8 dms, Heemsoth Kerner, Liverpool
11 dms, L & R Organic Products Co, Liverpool
ANNATTO SEED—189 bgs, Marcel Calvet, Guayaquil
ANTIMONY OXIDE—263 bgs, Antwerp
ANTIMONY REGULUS—100 cs, Indussa Corp, Antwerp
100 cs, C Gitlan, Antwerp
400 cs, Rijeka
ANTIMONIC ACID—3 cs, Celanese Corp of America, London
ASCORBIC ACID—100 dms, Genoa
BARBASCO POWDER—800 bgs, Astoria Pan Americana, Iquitos
BARIUM CHLORATE—50 dms, International Selling Corp, Marseille
BARIUM SULFATE—675 cs, Picker x-Ray Corp, London
BEESWAX—29 bgs, H H Pike & Co, Tampico
80 bgs, E Vadillo Ruiz, Curacao
93 bgs, Curacao
64 bgs, Puerto Plata
143 bgs, Tampico
62 bgs, Havana
BELLADONNA LEAVES—89 bls, Meer Corp, Rotterdam
BENZOIN GUM—12 cs, Joosten & Janssen, Bangkok
BERGAMOT OIL—28 hf cs, Messina
22 dms, National City Bank, Iquitos
3 dms, Chase Manhattan Bank, Iquitos
20 dms, Soibren Representation, Iquitos
BOIS DE ROSE OIL—1 dm, Elton Trading Co, Callao
15 dms, Fritzsche Bros, Iquitos
5 dms, Ungerer & Co, Iquitos
4 dms, Kline & Co, Iquitos
2 dms, Hollander Trading Corp, Manaus
5 dms, Analy Corp, Manaus
BRASS POWDER—10 dms, Heemsoth Kerner, Liverpool
BRONZE PRUSSIAN BLUE—15 dms, C J Osborn Co, Rotterdam
BUCHU LEAVES—14 bls, S B Penick & Co, Capetown
20 bls, E Dewitt Osborn, Capetown
BUTTONLAC—100 bgs, C H Timm, Calcutta
50 bgs, Calcutta
CALCIUM CARBONATE—280 bgs, Reeves & Sons, Liverpool
2,400 bgs, Whittaker Clark & Daniels, Liverpool
600 bgs, N H Weitzner, Antwerp
600 bgs, Pluess Staufer, Antwerp
CAMPHOR POWDER—27 cs, Chase Manhattan Bank, Keelung
25 cs, Manufacturers Trust Co, Keelung
CANDELILLA WAX—438 bgs, Smith & Nichols, Tampico
313 bgs, M Argueso & Co, Tampico
313 bgs, Frank B Ross, Tampico
313 bgs, Tampico
CARAWAY SEED—150 bgs, Levy & Levis Co, Rotterdam
400 bgs, Rotterdam
CARBON, ACTIVATED—374 dms, Natural Nyegger, London
CARNAUBA WAX—83 bgs, Marine Midland Trust Co, Salvador
CASEIN—2,000 bgs, Crawford Kish & Co, Gdynia
2,000 bgs Paul A Dunkel, Gdynia
287 bgs, F H Paul& Stein Bros, Oslo
CASHEWNUT SHELL LIQUID—32 bbls, Wm Zinsser & Co, Cochin
CASSIA—279 bls, Knickerbocker Mills, Saigon
272 bls, C M Van Sillevoldt, Rotterdam
47 bls, Hismoco American Co, Tandjong Priok
138 bls, Rotterdam
CASTOR OIL—234 tons, Wallace & Tiernan, Calcutta
273 tons, W R Grace & Co, Calcutta
250 tons, Recife
175 tons, Salvador
CELERY SEED—425 bgs, Frizsche Bros, Bombay
134 bgs, Ideal Trading Co, Bombay
120 bgs, Hismoco American Co, Bombay
170 bgs, Louis Furth, Bombay
CHLORINATED RUBBER—300 bgs, C M C Chemicals Inc, Liverpool
CINNAMON QUILLS—30 bls, Delano Corp of America, Colombo
60 bls, Colombo
CINNAMON BARK OIL—2 cs, Volkart Bros, Colombo
CINNAMON LEAF OIL—4 dms, Volkart Bros, Colombo
3 dms, Norda Essential Oil & Chemical Co, Colombo
CITRONELLA OIL—3 dms, Holland Colombo Society, Keelung
50 dms, Doran & Schmiedel, Keelung
25 dms, Lo Curto & Funk, Puerto Barrios
9 dms, Volkart Bros, Colombo
6 dms, Magnus Mabee & Reynard, Colombo
6 dms, George Lueders & Co, Colombo
CLAY—920 bgs, Cement Import Corp, Bremen
CLOVES—7 bgs, Catz American Co, Singapore
17 cs, A G Dunn, Colombo
COBALT OXIDE—361 cks, Antwerp
COCONUT OIL—600 tons, American Trust Co, Cebu
915 tons, Manila
COCONUT SHELL CHARCOAL—900 bgs, Colombo
COLORS, DRY—1,200 bgs, Naftone Inc, Bremen
COPAIBA BALSAM—5 dms, S B Penick & Co, Manaus
12 dms, Hollander Trading Corp, Manaus
15 dms, J M Rodrigues, Manaus
CORIANDER OIL—22 dms, S A Karas, Antwerp
1 cs, S A Karas, Antwerp
CORN OIL—260 tons, Corn Products Co, Rotterdam
CORN STARCH—1,800 bgs, Impex Agricultural Co, Rijeka
600 bgs, Antwerp
1,120 bgs, Rotterdam
CUBE POWDER—600 bgs, Foreign Domestic Distributors, Callao
CUBE ROOT—807 bls Merton Trading Co, Iquitos
CUMIN SEED—300 bgs, Khorramshahr
CUTTLEFISH BONE—320 cs, Morgan Guaranty Trust Co, Kobe
300 cs, Venice
CYANURIC CHLORIDE—500 dms, Geigy Chemical Corp, Hamburg
DAMMAR GUM—210 bgs, O G Innes Corp, Singapore
169 bgs, S Winterbourne & Co, Singapore
DEGRAS—108 dms, Olympic Shipping Co, Antwerp
60 dms, Crystal Extract & Chemical Co, Port Adelaide
20 dms, H J Meeter Co, Rotterdam
50 dms, N I Malmstrom, Manchester
DEXTRIN—200 bgs, Stein Hall & Co, Rotterdam
330 bgs, Morningstar Paisley Inc, Rotterdam
500 bgs, Bestick Adhesives, Rotterdam
DIACETYL—4 cs, Dorf International, Rotterdam
DILL SEED—87 bgs, M J Golombeck, Bombay
DYES, COAL TAR—40 dms, L & R Organic Products Co, Genoa
13 dms, H Bruckmann & Lorbacher, Bremen
462 dms, Naftene Inc, Hamburg
EARTH COLORS—600 bgs, Smith Chemical & Color Co, Rotterdam
1,900 bgs, Rotterdam
EUCALYPTOL—15 dms, Seville
FENNEL SEED—82 bgs, Louis Furth, Bombay
FUEL OIL—102,887 bbls, Humble Oil Co, Caripito
124,241 bbls, Hess Inc, Bajo Grande
108,586 bbls, Hess Inc, Punta Cardon
121,000 bbls, Humble Oil Co, Aruba
204,610 bbls, Shell Caribbean Petroleum Co, San Lorenzo
420,929 bbls, Shell Caribbean Petroleum Co, Punta Cardon
GALBANUM GUM—28 cs, Kharramshahr
GELATIN—200 bgs, Manhattan Adhesives Corp, Rotterdam
300 bgs, King Shipping Co, Bremen
200 dms, Franco Belgian Corp, London
73 dms, B Young, London
400 bgs, Davis Gelatine Inc, Sydney
160 bgs, Chase Manhattan Bank, Bremen
192 dms, H Bruckmann & Lorbacher, Rotterdam
GENTIAN ROOT—166 bgs, Alicante
GERANIUM OIL—2 dms, Centflor Manufacturing Co, London
GINGER—90 bgs, Kellys America Ltd, London
52 bgs, Mincing Trading Corp, London
94 bgs, London
GLUE—200 bgs, Manhattan Adhesives Corp, Rotterdam
GLUESTOCK—102 bls, D J Ambrosio, Dublin
GLYCERINE—200 dms, Chemical Bank, Cartagena
GLYCERPHOSPHORIC ACID DISODIUM SALT—2 dms, London
GRAPHITE—500 bgs, Asbury Graphite Mills, Colombo
GUAR GUM—100 bgs, T M Duche & Sons, Rotterdam
937 bgs, J L Quesada, Valencia
1,750 bgs, Stein Hall & Co, Calcutta
GYPSUM, CRUDE—16,603 tons, National Gypsum Co, Halifax
12,474 tons, Allied Chemical Corp, Halifax
10,351 tons, U S Gypsum Co, Hantsport
HEXACHLOROETHANE—300 bgs, Henley & Co, Hamburg
HORNMEAL—1,000 bgs, Transatlantic Animal By Products Corp, Gdynia
HYDRAZINE HYDRATE—50 pails, E F Drew & Co, Bremen
INOSITOL—5 cs, Hudson Shipping Co, Genoa
IODINE, CRUDE—79 kgs, Mitsubishi Corp, Yokohama
IRISH MOSS—100 bls, S B Penick & Co, Havre
50 bls, H Reifenberg, Havre
50 bgs, Meer Corp, Havre
IRON OXIDE—100 bgs, Hudson Shipping Co, Oslo
160 bgs, Madras
JAPAN WAX—35 cs, Mitsubishi Corp, Kobe
KARAYA GUM—183 bgs, Meer Corp, Bombay
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184 bgs, S B Penick & Co, Bombay
373 bgs, Morningstar Paisley Inc, Bombay
186 bgs, Nehls & O'Connell, Bombay
61 bgs, Paul A Dunkel, Bombay
KOLA NUTS—200 bgs, D Steengrafe & Co, Kingston
591 bgs, Apapa
LAVANDIN OIL—23 cks, Tombarel Products Co, Cannes
LEAD NITRATE—67 dms, Antwerp
LEMON OIL—1 dm, Felton Chemical Co, Vera Cruz
1 dm, Ungerer & Co, Vera Cruz
5 hf cs, Messina
LEMONGRASS OIL—6 dms, Chase Manhattan Bank, Cochin
23 dms, Marine Midland Trust Co, Cochin
150 dms, Cochin
LIME OIL—3 dms, Citrus & Allied Essential Oils Co, Cristobal
1 dm, Port Au Prince
LIVERMEAL—635 bgs, Wessel Duval & Co, Buenos Aires
LOCUST BEANS—138 bgs, Crossocean Shipping Co, Rijeka
LOCUST BEAN GUM—100 bgs, J L Quesada, Valencia
900 bgs, J L Quesada, Portimao
200 bgs, Meer Corp, Portimao
300 bgs, Wm M Allison & Co, Portimao
672 bgs, Stein Hall & Co, Genoa
300 bgs, T M Duche & Sons, Genoa
LOGWOOD EXTRACT—20 cks, American Dyewood Co, Kingston
MACE—50 cs, C M Van Sillevoldt, Singapore
14 cs, Rotterdam
MAGNESITE—600 bgs, Globe Shipping Co, Trieste
1,200 bgs, Cochin
MAGNESIUM CARBONATE—1,200 bgs, Reheis Co, Liverpool
MANDARIN OIL—5 hf cs, Messina
MANGROVE BARK—1,200 bgs, Chemical Bank, Dares Salaam
MARJORAM—100 bgs, Foreign Domestic Distributors, Callao
MELAMINE—120 bgs, Philipp Bros Chemicals, Liverpool
MENTHOL—50 cs, Fritzsche Bros, Santos
50 cs, Chase Manhattan Bank, Santos
10 cs, Magnus Mabee & Reynard, Keelung
50 cs, Keelung
MERCURY—500 flks, Lo Curto & Funk, Leghorn
MOLASSES—555 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—218 dms, International Selling Corp, Marseille
MUSK XYLOL—50 cks, Compagnie Parento Inc, London
MYRISTYL ALCOHOL—2 dms, Liverpool
NAPHTHA—161,013 bbls, Hess Inc, Curacao
NAPHTHALENE—500 bgs, Antwerp
NAPHTHENIC ACID—3,174 bbls, Humble Oil Co, Aruba
NUTMEG—84 bgs, National City Bank, Rotterdam
14 bgs, Catz American Co, Singapore
160 bgs, Rotterdam
OCOTEA CYMBARIUM OIL—29 dms, Lo Curto & Funk, Itajai
OLIVE OIL—543 dms, Swiss Credit Bank, Malaga
48 dms, J H Schroder, Malaga
165 dms, Manufacturers Trust Co, Seville
50 dms, Chemical Bank, Seville
165 dms, Atlantic Bank of N Y, Seville
60 dms, National City Bank, Seville
OXGALL—4 dms, International Packers Ltd, Santos
4 dms, J M Rodgers, Sydney
1 dm, J M Rodgers, Brisbane
PALMAROSA OIL—4 pots, J Manheimer, Bombay
1 pot, Florasynth Lab, Bombay
PALMKERNEL OIL—2,236 cs, B M T Commodity Corp, Rotterdam
68 dms, Rotterdam
PAPAIN—31 hf chts, V A Cordovi, Colombo
51 cs, Chas L Huisking & Co, Colombo
PAPRIKA—80 bgs, Tri State Packing Co, Rotterdam
400 bgs, First National Boston, Rotterdam
338 bgs, E Bier & Co, Rotterdam
110 bgs, National City Bank, Hamburg
300 bgs, J Raphael & Sons, Hamburg
PATCHOULI OIL—17 dms, Tombarel Products Corp, Penang
PEATMOSS—1,750 bls, Premier Peatmoss Corp, Hamburg
1,500 bls, Premier Peatmoss Corp, Bremen
2,000 bls, New Amsterdam Import Co, Aarhus
3,000 bls, E J Lang, Bremen
1,100 bls, Marine Midland Trust Co, Bremen
900 bls, Lewis Intern Co, Bremen
1,500 bls, Bruco Peatmoss Corp, Bremen
3,000 bls, Garden Supply Co, Bremen
PECTIN—18 dms, T M Duche & Sons, Hamburg
PEPPER, BLACK—160 bgs, Daarnhower & Co, Cochin
80 bgs, Ludwig Mueller, Cochin
380 bgs, Singapore
80 bgs, Colombo
PERCAMORPH FISHLIVER OIL—2 cs, Arista Oil Products Corp, Yokohama
PERCHLOROETHYLENE—125 dms, International Selling Corp, Marseille
PETROLEUM, CRUDE—202,683 bbls, Pure Oil Co, Maracaibo
394,906 bbls, Ashland Oil & Refining Co, Maracaibo
263,821 bbls, Hess Inc Punta Cardon
140,577 bbls, Hess Inc, Bachaquero
194,294 bbls, California Oil Co, Sidon
123,936 bbls, Humble Oil Co, La Salina
PIMENTO—80 bgs, Louis Furth, Kingston
160 bgs, M J Golombeck, Kingston
PIMENTO LEAF OIL—4 dms, Lo Curto & Funk, Kingston
3 dms, Magnus Mabee & Reynard, Kingston
POLLACKLIVER OIL—75 dms, Peder Devold Oil Co, Yokohama
POLYVINYL ACETATE EMULSION—25 dms, Lloyd Associates, Bremen
POLYVINYL CHLORIDE RESIN—2,000 bgs, Nehls & O'Connell, Yokohama
POPPYSEED—100 bgs, Rotterdam
POTASH, CAUSTIC—378 dms, B T Chemco Inc, Gothenburg
12 cs, B T Chemco Inc, Gothenburg
PRUSSIAN BLUE—87 dms, Van Oppen & Co, Liverpool
PSYLLIUM SEED, HUSKS—238 bgs, Meer Corp, Bombay
QUASSIA CHIPS—190 bgs, Kingston
QUEBRACHO EXTRACT—517 bgs, Barkey Importing Co, Buenos Aires
4,544 bgs, American Tanners Ltd, Buenos Aires
RAUWOLFIA SERPENTINA ROOT—40 bgs, Calcutta
RAUWOLFIA VOMITORIA ROOT—44 bgs, Antwerp
RUTIN—13 dms, S B Penick & Co, Sydney
R-SALT—27 dms, W A Erickson & Co, Rotterdam
101 kgs, D C Andrews, Genoa
SAFFLOWER—20 bgs, F D Keller & Son, Vera Cruz
101 bgs, Calcutta
SAGE LEAVES—17 bls, R D Heins, Genoa
SAGO FLOUR—703 bgs, National Starch & Chemical Co, Liverpool
219 bgs, Morningstar Paisley Inc, Singapore
SANDALWOOD—100 bgs, Natianonal City Bank, Bombay
SANDALWOOD OIL—4 cs, Polarome Manufacturing Co, Bombay
2 cs, A Chiris Co, Bombay
12 cs, Cochin
SAPONIN—10 dms, Karr Ellis, Liverpool
SCAMMONY ROOT—16 bgs, F D Keller & Son, Vera Cruz
SEAWEED MEAL—320 bgs, Coleman International Co, Dublin
SEEDLAC—250 bgs, United Shellac Corp, Kohsichang
250 bgs, Wm Zinsser & Co, Kohsichang
250 bgs, Haeuser Shellac Co, Bangkok
250 bgs, Gillespie Rogers Pyatt, Bangkok
500 bgs, United Shellac Corp, Bangkok
250 bgs, Gillespie Rogers Pyatt, Calcutta
500 bgs, C H Timm, Calcutta
200 bgs, Haeuser Shellac Co, Calcutta
700 bgs, Wm Zinsser & Co, Calcutta
250 bgs, Mantrose Corp, Bangkok
1,650 bgs, Calcutta
SENNA CONCENTRATE—8 cs, Bard Pharmaceuticals, London
SESAME SEED, Hulled—750 bgs, Louis Furth, Cristobal
900 bgs, Nieman Bros, Cristobal
100 bgs, R J Spitz, Cristobal
300 bgs, J Prio, Cristobal
78 bgs, Louis Furth, Bombay
SHEA NUT OIL—98 cs, Heemsoth Kerner, Aarhus
SHELLAC—55 bgs, National City Bank, Hamburg
55 bgs, F H Paul & Stein Bros, Hamburg
66 bgs, F H Paul & Stein Bros, Bremen
200 bgs, Gillespie Rogers Pyatt, Calcutta
50 bgs, Haeuser Shellac Co, Calcutta
200 bgs, Wm Zinsser & Co, Calcutta
250 bgs, Calcutta
SODA CAUSTIC—342 dms, B T Chemco Inc, Gothenburg
SODIUM ALGINATE—50 dms, Stein Hall & Co, Glasgow
SODIUM CYANATE—1 dm, Terra Chemicals Inc, Hamburg
SODIUM SILICOFLUORIDE—500 bgs, H Sundheimer, Hamburg
SODIUM SULFATE, ANHYDROUS—3,000 bgs, Lo Curto & Funk, Antwerp
SPEARMINT LEAVES—85 bgs, Port Said
SPERM OIL—500 tons, Swift & Co, Rotterdam
STARCH—700 bgs, Morningstar Paisley Inc, Rotterdam
STRYCHNINE ALKALOID—1 cs, A W Fenton, Rotterdam
STYRAX GUM—26 cs, Meer Corp, Izmir
SULFAMIC ACID—100 bgs, Caldwell & Co, Havre
SULFUR, CRUDE—4,300 tons, E I Dupont De Nemours & Co, Coatzacoalcos
TALC—800 bgs, Whittaker Clark & Daniels, Bordeaux
1,605 bgs, L A Salomon & Bro, Bordeaux
400 bgs, C B Chrystal Co, Bordeaux
10,464 bgs, Charles Mathieu, Genoa
TAMARINDS—65 bbls, Calcutta
TAPIOCA—400 bgs, Manhattan Adhesives Corp, Itajai
TAPIOCA FLOUR—5,600 bgs, Morningstar Paisley Inc, Kohsichang
1,600 bgs, Manhattan Adhesives Corp, Keelung
1,200 bgs, Stein Hall & Co, Itajai
1,007 bgs, Geismar & Co, Kohsichang
TETRAETHYL DITHIOPYROPHOSFATE — 6 dms, European Chemical Co, London
THALLIUM SULFATE—2 cs, Hudson Shipping Co, Bremen
1 cs, Bremen
THEOBROMINE—10 dms, Rotterdam
THYME LEAVES—273 bgs, Alicante
THYROID POWDER—25 cs, Rotterdam
TITANIUM DIOXIDE, ANATASE—1,323 bgs, Maurbeni Iida Co, Kobe
TONKA BEANS—20 cs, S S O'Hanna & Son, La Guaira
150 cks, Machado & Co, Port of Spain
60 cs, Manaus
TRAGACANTH GUM—179 bgs, Am-Iran Corp, Khorramshahr
510 bgs, Khorramshahr
TRIMETHYLXANTIN—4 cs, Bremen
TUNG OIL—212 tons, Bunge Corp, Buenos Aires
TURMERIC—56 bgs, C Czarinkow, Madras
VALERIAN ROOT—170 bgs, S B Penick & Co, Bombay
VETIVER OIL—3 dms, Lo Curto & Funk, Cristobal
2 dms, Port Au Prince
VINCA ROSEA LEAVES—5 bls, Meer Corp, Madras
XYLENOL—37 dms, D Hauser, Antwerp
ZINC CYANIDE—22 dms, Atlas Shipping Co, Genoa
ZINC OXIDE—195 bgs, London
ZINC YELLOW—200 bgs, Revelli Chemicals, Antwerp
ZIRCON SAND—2,400 bgs, International Titanium Corp, Brisbane
995 bgs, Chase Manhattan Bank, Brisbane
460 dms, Apapa

Los Angeles

CARAWAY SEED—100 bgs, R J Spitz, Rotterdam
COPRA—500 tons, Wells Fargo Bank, Zamboanga
500 tons, Cargill Inc, Ozamis
900 tons, Wells Fargo Bank, Legaspic
500 tons, Pacific Vegetable Oil Corp, Legaspi
500 tons, Cargill Inc, Sian
700 tons, Wells Fargo Bank, Sian
500 tons, Cargill Inc, Manila
200 tons, National City Bank, Manila
650 tons, Procter & Gamble Co, Dumaguete
500 tons, H M F Faure & Co, Dumaguete
500 tons, Pacific Vegetable Oil Corp, Cebu
800 tons, Procter & Gamble Co, Cebu
FUEL OIL—198,199 bbls, Standard Oil Co, Aruba
MOLASSES—1,530 tons, Pacific Molasses Co, Topolobampo
NAPHTHA—79,999 bbls, Union Oil Co, Matsuyama
PEATMOSS—1,500 bls, Atkins Kroll & Co, Bremen
PEPPER, BLACK—140 bgs, Mac Albert Co, Singapore
PETROLEUM, CRUDE—126,178 bbls, Douglas Oil Co, San Lorenzo
SODIUM CYANIDE—300 dms, Ugine Industries, Havre
WAX—180 bgs, Chemical Manufacturing Co, Bremen
ZIRCON SAND—400 bgs, Chemical Manufacturing Co, Brisbane

Philadelphia

CALCIUM CARBONATE—4,000 bgs, Antwerp
CASEIN—1,000 bgs, National Casein Co, Gdynia
CASTOR OIL—172 tons, Bunge Corp, Bombay
CHESTNUT EXTRACT—500 bgs, Tac Tannins & Chemicals Inc, Bordeaux
CORN STARCH—400 bgs, Impex Agricultural Co, Rijeka
CRESYLIC ACID—200 dms, Concord Chemical Co, Rotterdam
CRYOLITE—2,170 tons, Pennsalt Chemical Corp, Ivigut
FISHLIVER OIL—66 dms, Phila National Bank, Yokohama
FUEL OIL—133,036 bbls, Hess Inc, Puerto La Cruz
113,220 bbls, Reserve Terminal Corp, Punta Cardon
LICORICE ROOT—4,479 bls, Mac Andrews & Forbes, Kyllini
MAGNESITE—920 tons, Split
MOLASSES—12,102 tons, Nuevitas

—Continued on page 63

Oils, Fats and Waxes

With buying interest slow, the oils and fats market turned easier, scoring fractional declines last week. Soybean oil dropped ⅜ cent with lower futures market. This was reflected in cottonseed and peanut oils. The former was off slightly, while peanut oil dropped sharply—¾ cent per pound. Corn oil was quiet and unchanged. Crude coconut oil continued easy and sales took place at ½ cent lower on the Pacific coast for August October delivery, while the New York market was merely nominal at ¼ cent lower.

Cash lard which was steady for the past month, became weaker and declined ½ cent per pound.

Further weakness developed in greases and tallow. Lack of buying interest caused all grades to decline ⅛ cent. Demand at the decline was light in volume and restricted to actual needs. Export business continued slow.

There was little doing in industrial oils. Linseed oil moved briskly against contracts, while new business was quiet. Tung oil was inactive and shadable as was Brazilian castor oil. Crude menhaden continued quiet at the recent reduction of ¼ cent. Other industrial oils were dull and featureless.

Soybean meal continued in active demand, scoring an advance of $4 per ton for unrestricted delivery. Improved trading also was noted in linseed meal and prices advanced 50 cents per ton.

Early August indications point to a total U. S. supply of edible fats, oils, and oilseeds during the 1960-61 marketing year of about 14.0 billion pounds (oil equivalent of oilseeds), approximately 2 percent or about 0.3 billion pounds less than the record quantity available during the current year, according to the Department of Agriculture. Smaller supplies of soybeans than those a year ago are expected to account for most of the reduction in supply.

Price Trends

Advanced

Linseed meal, 50c. per ton
Soybean meal, $4 per ton

Reduced

Carnauba wax, yellow, 2c. per lb.
Coconut oil, crude, Pac. coast, ¼c. per lb.
New York, ¼c. per lb.
Copra, $5 per ton
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Greases, ¼c. per lb.
Lard, cash, ½c. per lb.
Peanut oil, crude, ¾c. per lb.
Refd., ¾c. per lb.
Soybean oil, crude, ¾c. per lb.
Refd., ¾c. per lb.
Tallow, inedible, ⅛c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug. 28, 1959
108.15	107.69	107.98	112.78

For Current Prices see Page 10

Vegetable Oils

Castor—Trading continued confined to actual needs. No. 1 Brazilian oil ranged from 18¾c. to 19c. per pound, tankcars, New York, prompt delivery according to seller. Domestic grades were quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	....	1,958,000
Previous week	....	254,000
Corresponding week, 1959	17,100	....
Total this year	3,342,500	61,754,000
Corresponding period, 1959	18,852,850	63,882,000

Coconut—Crude continued easy and lower. Sales were reported at 12¼c. per pound, tankcars, f.o.b. Pacific coast, for August-October with sellers asking 12½c. Tankcars at New York were nominal and lower at 14¾c., prompt delivery.

Corn—Trading was quiet. Crude was quoted at 12c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil was unchanged at 15.73c., tankcars, New York basis.

Linseed—Withdrawals against existing contracts continued brisk, while new business was confined to fill-in needs. Raw oil was unchanged at 13.20c. per pound, tankcars, Minneapolis, August-November and 14.31c. f.o.b. New York.

Cottonseed — Futures turned weaker and declined fractionally as a result of lower soybean oil on the New York Produce Exchange last week. Trading was active, the market declining under liberal liquidation which carried quotations into new low ground for this move. Trade interests continued to absorb September oil on a scale downward against sales of futures. Selling pressure was active in September and lost its premium over October. Cash oil was quiet and lower. Refined salad was quoted at 13c. per pound, tankcars, New York basis.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, August 26, follow:

	Sales	High	Low	Close
		Cents per Pound		
Sept.	235	12.07	11.61	11.61S
Oct.	63	11.95	11.58	11.58S
Dec.	293	11.91	11.55	11.55S
March	201	11.93	11.59	11.57@11.59
May	201	11.90	11.58	11.60S
July	59	11.94	11.59	11.60S
Sept., 1961	7	11.78	11.46	11.46S
Oct., 1961	2	11.65	11.64	11.40 Bid

Total sales and switches, 991 contracts.

Trading in crude was reported light. Quotations for nearby were easy and nominal at 9⅞c. per pound, tankcars, southeast and Valley, with September delivery offered at .09¾c. and October-December, 9⅝c., same basis. Waco was quoted at 9¾c. for prompt.

Olive—The market ruled steady with firmness of replacements from primary sources. Trading lacked snap. Spanish oil was maintained at $54 to $55 per 100 kilos, drums, f.o.b. shipping point, prompt shipment. Oil on spot was unchanged ranging from $2.30 to $2.35 per gallon, drums, duty paid, according to quantity.

Peanut—Crude was inactive and declined ¾c. Market dropped to 15½c. per pound, tankcars, f.o.b. mills, prompt shipment. Demand was slow. Refined oil was lower at 18¾c., New York basis.

Soybean—Trading was slow. Market was easier and crude was off ⅜c. Tankcars were quoted at 9⅜c. per pound, Decatur, unrestricted, August delivery. Refined salad was lower at 9⅜c. to 9.55c., tankcars, New York, prompt.

Tung—Buying interest lagged and the market was more or less nominal. Tankcars were offered at 23c. per pound, New York, prompt delivery and shadable on firm bids. Drums were unchanged at 24½c. to 25c., spot, according to quantity.

Cottonseed Crush: July

Cottonseed received and crushed and production of cottonseed products during July and June, as complied by Bureau of Census, follows:

Cottonseed

	July	June
	Tons	
Receipts at mills	56,400	10,400
Crushed or used	142,700	176,600
Stocks at mills	104,800	191,100
Crude Oil		
	Pounds	
Produced	51,300,000	62,600,000
Stocks at mills	12,900,000	14,200,000
Cake and Meal		
	Tons	
Produced	70,000	83,000
Stocks at mills	189,900	202,800
Hulls		
	Tons	
Produced	34,300	39,800
Stocks at mills	28,700	35,500

Miscellaneous

Cocoa Butter—Market was quiet and fairly steady. Prices ranged from 58c. to 63c. per pound, spot, as to quantity.

Copra—Shipments were easier, with trading reported at $170 per ton, c.i.f. Pacific coast, prompt delivery.

Flaxseed—Cash flaxseed bids were firm at $3.10 a bushel, spot and to-arrive, basis Minneapolis. To-arrive bookings increased sharply as harvest got under way over widespread area, offerings in spot market extremely light. Harvest in South Dakota

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Oils, Fats and Waxes

is about three-quarters completed. North Dakota harvest is sharply behind last year, only about 25 percent completed.

Fats and Greases

Greases—This market continued easy and quotations were further reduced ½c. Trading was light at the lower levels. Choice white was nominal at 7¼c. to 7⅜c. tankcars, delivered and yellow at 4⅞c., same basis.

Lard—An easier tone developed and cash lard declined ¼c. Drums were lower at 11.225c. per pound, f.o.b. Chicago.

Exports of U.S. lard in the first half of 1960 were 343 million pounds, compared with 274 million pounds a year earlier. Shipments to the United Kingdom more than doubled and accounted for 59 percent of total exports. Lard trade with Britain has been booming since the development of bulk shipping early last year. Shipments to Cuba declined 13 percent from the 1959 level but were above the corresponding period of 1958. These 2 markets now take 90 percent of U.S. lard exports. Exports to West Germany, Yugoslavia, and Mexico declined rather sharply.

U.S. lard exports in the second half of 1960 will probably fall off as a result of reduced domestic supplies and higher prices. Prices have risen steadily from the low levels of last year, and the price of lard at Chicago in early August was 10.25c. per pound, compared with 7.0c. a year earlier.

Tallow—With trading slow, prices were weak and declined another ½c. Light sales were reported at the decline. Bleachable fancy was quoted at 5¾c. per pound, tankcars, delivered; prime, 5½c.; special, 5¼c.; No. 1, and 4⅞c. and guaranteed fancy 6⅛c., same basis. Export interest was inactive. Guaranteed fancy was nominal at 6¼c., bulk, f.o.b. and drums 1c. higher, f.a.s.

Exports of inedible tallow and grease from the United States increased from 647 million pounds in the first half of 1958 to 904 million pounds through June this year, an increase of nearly 40 percent.

Shipments to the major destinations—Italy, the Netherlands, and Japan—increased 19, 39, and 44 percent, respectively. Exports to France rose from a negligible amount during this period in in 1959 to over 25 million pounds this year. Shipments to Cuba, Yugoslavia, Taiwan, Korea, Peru, and Ireland declined.

Cake and Meal

Cottonseed Meal — New crop meal moved slowly, with most sales for immediate and 30-day shipments. Meal, 41 percent, was quoted at $54 per ton sacked, Memphis, and $56.50 Alabama, Georgia and Alabama area for September shipment and $1 less through December.

Linseed Meal—Brisker demand developed for nearby supplies, along with increased inquiry for deferred deliveries. Prices were firm. Formula feed manufacturers drew on old balances at an accelerated rate, absorbing heavier production. Extracted meal, 34 percent protein, was higher at $53 per ton, bulk, in carlots, f.o.b., Minneapolis, prompt delivery, and $54, October forward. Old process expeller meal was unchanged at $58.50 for September, and $59.50 for October-December.

Shipments of linseed meal, in pounds, were as follows:

	1959-60	1958-59
Past week	11,040,000	9,960,000
Since Sept. 1	469,120,000	554,180,000

Soybean Meal—Pronounced strengthening occurred in this market, reflecting sizable export business and slower August crush. Surpluses were well cleaned up and tightness developed in supplies. Meal, 44 percent, was boosted to $53 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Trading in vegetable waxes continued restricted to actual needs. Fatty carnauba was unchanged and steady, while refined grades were easy, off 1c. per pound. Yellows also were easier and declined 2c. per pound. No. 1 Ceara yellow was quoted at $1 to $1.02 per pound, spot and Parnahyba, $1.02 to $1.03, same basis.

Demand for candelilla on spot was light. Prices remained steady and unchanged. Crude ranged from 55c. to 58c. per pound, spot, as to quantity.

Crude beeswax was firm and scarce for shipment. Refined grades were quiet but well held because of the strength of crude.

Soybean Crush: July

Soybeans received and crushed and production of soybean oil and meal during July and June, as compiled by Bureau of Census, follows:

Soybeans

	July	June
	Tons	
Receipts at mills	666,100	825,900
Crushed or used	941,300	939,800
Stocks at mills	1,016,300	1,291,500

Crude Oil

	Pounds	
Produced	350,000,000	348,600,000
Stocks at mills	135,200,000	133,800,000

Cake and Meal

	[1] Tons	
Produced	733,400	733,800
Stocks at mills	130,400	116,200

[1] Includes millfeed (hull meal).

Inland Container Corp. Hits Anti-Merger Charges

The nation's third largest shipper of corrugated shipping containers — Inland Container Corporation of Indianapolis, Ind.—flatly denies Federal Trade Commission charges that its acquisition of the Louisville, Ky., plant of the General Box Company violates the anti-merger law.

Says Inland: "The business of manufacturing and selling corrugated shipping containers has at all times been and continues to be highly competitive and no manufacturer has become dominant in said business either nationally or locally."

The company reports that it shipped some 5.16 percent of the national total in 1959, that the combined shipments of the ten largest companies in the United States in that year were about 48 percent of the total and that this percentage has not varied appreciably during the past ten years.

During this period, Inland points out, the combined shipments of the twenty largest companies have constituted approximately 60 percent to 65 percent of the national total.

The FTC complaint says Inland offered to buy the Louisville plant in 1954 and at various times during the next four years, but General Box rejected these offers. During this time, Inland started to acquire General Box capital stock and by May 27, 1958, had obtained more than 50 percent of the outstanding shares.

On June 30 of that year, it acquired the plant from General Box in exchange for 1,084,000 shares it bought up at a cost of more than $3 million.

The company admits this but asserts that while the acquisition "has improved the ability and opportunity of Inland to compete in the Louisville area in some respects, such improvement has not constituted and does not constitute an enhancement of Inland's competitive power, either actual or potential, and has not and is not to the detriment of either actual or potential competition, and there is no reasonable probability of detriment to actual or potential competition resulting therefrom."

Resin Coating Forecast

—*Continued from page 4*

$3.1 billion. A preliminary estimate for 1965 shows a moderate increase to $3.75 billion.

The appliance industry will have to push hard if it expects to top by 1965 the record $5.2 billion in sales chalked up in 1956.

Underscoring the importance of new applications, the study notes that if resins merely grow at the rate experienced during the last twenty years in established lines, sales will rise to only 825 billion pounds by the target year.

The new study, from which this analysis has been excerpted, is available from Chemical Marketing & Research Company of New York.

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Trade Name Chemicals & Specialties

Aromatic amines, phenols and quinones continue to find widespread use as antioxidants in petroleum-based products, in the rubber industry and in protective coatings. In recent years much work has also been done in developing additives for food and feed use which would serve to protect fats and oils, fish products, vitamins and various other edibles from rancidity and "off-flavors" which may develop as a result of degenerative oxidation. The rubber antioxidants are particularly useful in tread and sidewall areas of truck and auto tires where flex cracking and general rubber breakdown are apt to occur. The antioxidant to be used depends on the particular application, solubility requirements, toxicity, color and activity.

As food or feed additives, butylated hydroxytoluene, butylated hydroxyanisole and propyl gallate are the materials which have been most widely used. These antioxidants may be used separately or in combination in food and feed applications. A metal deactivator, such as citric, tartaric or ascorbic acid is also frequently incorporated with the antioxidant. With the increasing use of wax and plastic wrappings in food packaging, it has become advisable for the food processor to stabilize food packages with antioxidants to prevent development of spoilage through oxidation.

Union Carbide Chemicals Company has started commercial production of hexamethylenetetramine under the tradename **"Ucar"** hexa. The chemical reacts as does formaldehyde, but does not liberate water in solution, which eliminates the irritating odor characteristic of formaldehyde in water solution. Widest application of **"Ucar"** hexa, says Carbide, is as a crosslinking agent in novolac resins and varnishes. The product is being made available in four grades—powdered or crystalline and with or without a free-flow agent. Carload or truckload price in bags, for all four grades, is 23.3 cents a pound.

Sandoz, Inc., has announced a new dye, **"Foron Brilliant Blue GFLN,"** which is reported to afford improved dispersibility, and therefore shows increased stability to dyeing at the boil. The dye is recommended for use on acetate, triacetate and polyester fibers.

Antioxidants

The rubber industry continues to make use of sizable quantities of aromatic amines, phenols and quinones which are incorporated in rubber stock and function as antioxidants in substantially increasing the useful life of a wide variety of rubber products. These rubber antioxidants are particularly useful in tread and sidewall areas of truck and automobile tires where flex cracking and general rubber breakdown have always posed knotty problems for the rubber chemist. In addition to applications in the rubber industry, these same materials may be utilized to prevent oxidation of fuels, lubricants, hydraulic fluids and greases, plastics, animal fats, vegetable oils, grains, vitamins, drying oils and fish products.

The particular antioxidant to be used depends on such requirements as solubility, toxicity, color and activity. Much work has been done in recent years on addition of antioxidants to food and feed products. Animal feeds in particular may be protected against oxidation which results in rancidity in fats and destruction of vitamins. Usually feed producers add a sufficient amount of vitamins to provide a margin of safety and avoid use of unstable fats or oils in their formulations. However, synthetic antioxidants added to mixed feeds serves as oft-needed added protection.

In this country the most important antioxidants for fats and oils are butylated hydroxytoluene, butylated hydroxyanisole and propyl gallate. Feed formulations with these phenolics may also contain an organic acid (citric, tartaric or ascorbic) which acts as a metal deactivator. The antioxidants may be used separately or in combination in animal fat rendering in the meat packing industry, in vegetable oils, with essential oils and vitamins and in confectionary products. Waxes used on food packages are also stabilized with antioxidants to prevent "off-flavors" in food products.

Food products with a high oil content fall into the group of foods having a relatively short fresh life. Instability is often increased by high processing and storage temperatures and exposure to air and light. For example, fishmeals contain up to 10 percent of highly reactive oils, re-

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

activity of the oil depending on the type and size of the fish, methods of processing and other factors. Oxidation of these oils in fishscrap during cure can result in heating or even spontaneous combustion under certain conditions. To retard this heat buildup, butylated hydroxytoluene may be added to the fishscarp along with a lecithin such as fish solubles. The action of the fish solubles is believed to be that of a solubilizer or chelating agent.

Nuts and nut products, which also have a high oil content, may be stablized by addition of an antioxidant directly to the cooking oils, although this procedure is not generally as effective as applying the antioxidant after the cooking operation. The antioxidant can also be added during the salting of potato chips or nuts using the salt as the antioxidant carrier. Economics favor this method since additional production equipment is not required.

Antioxidants find widespread use in treating fuels, greases and hydraulic fluids. For example aviation gasoline in contact with air will form a gum or precipitate a lead compound formed from tetraethyl lead if not protected with an antioxidant.

Development of antioxidants or oxidation inhibitors has provided the petroleum refiner with a means of performing two operations at once; 1) removal of sour smelling hydrogen sulfide and mercaptans (sweetening) and 2) use of the additive as a gum inhibitor. In sour gasolines such products as Tennessee Eastman Company's "Tenamene" are believed to act as an oxidation catalyst in converting foul smelling mercaptans to disulfides which are virtually odorless. The **"Tenamene"** then remains in the sweetened gasoline to provide effective protection against gum formation. Eastman also makes the **"Tenox"** grades of antioxidants for use in feeds and food.

Goodyear Tire and Rubber Company markets **"Wing-Stay 100."** The material is reported as a "non-volatile, staining type combination stabilizer, antioxidant and antiozonant to prolong rubber life." According to the company, use of this chemical allows rubber compounders to impart to rubber a combination of properties not available in one rubber additive alone. Non-volatile properties of the material allow it to keep its antiozine qualities over a long period of time. This is especially important in ruber articles which operate at high temperatures and under unusual stress, the company reports. The product does not activate the cure of rubber stocks in the processing stage and its use allows for normal rubber processing without fear of premature cure and consequent waste. Of particular importance to recappers is the reported ability of the material to add deterioration resistance to unvulcanzied retread stock.

E. I. duPont de Nemours & Co. manufactures **"Akroflex," "Antox," "Neozone"** and **"Thermoflex"** antioxidants. All are aromatic amine antioxidants with the exception of **"Antox"** which is a butraldeh-

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LOOK OVER THE CONTENTS

1. What Constitutes a Waste Problem?
2. Who Starts a Waste-treatment Problem?
3. The First Steps to Take in the Solution
4. The Place of the Engineer or Specialist
5. Cooperation between Enforcing Agencies, Industrialist, and Technician
6. Factors in the Solution of a Waste Problem
7. The Interests Concerned in Industrial-waste Problems
8. Districts for Industrial-waste Treatment
9. Sampling and Analysis of Wastes
10. Combining Wastes from Several Plants to Reduce Costs
11. The Pollutional Effect of Various Wastes
12. Methods of Waste Treatment
13. Equipment for Waste Treatment and Its Selection
14. Coagulants and Chemicals
15. Handling Industrial Wastes in Municipal Systems and Charges Therefor
16. Factors in the Development of Low-cost Plants
17. Reuse of Wastes and Recovery of Values

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Trade Name Chemicals

hyde-aniline condensation product. All of these products are useful in preventing flex cracking in natural and synthetic rubber stocks and impart good resistance to both heat and normal aging. **"Neozone A"** is a general purpose antioxidant for all elastomers. It is interesting to note that the active ingredient of this product, phenyl-a-naphthlyamine, has found use in divinyl ether, **"Vinethrene,"** as an antioxidant to prevent autoxidation of the ether to explosive peroxides.

Quick-drying paints and industrial finishes also require protection from oxidative degeneration. In this area, Heyden Newport Chemical Corp. markets **"Lignocol"** for prevention of skinning during storage and wrinkling after the film has been cast in quick-drying paint finishes. The product is a clear, practically odorless liquid phenolic compound reported to be particularly effective in dipping tanks and industrial finishes where stubborn skinning problems are encountered. The material has proven effective in preventing skinning in alkyd resin formulas, ester gum varnishes and phenolic type varnishes, the company reports.

Dyestuffs Production

—Continued from page 4

million pounds reported for 1958. Sales amounted to 24.5 million pounds, valued at $54.2 million, compared with sales in 1958 of 19.5 million pounds, valued at $43.2 million—an increase of 25.6 percent in terms of quantity and 25.5 percent in terms of value.

The individual toners produced in the largest quantities in 1959 were: pigment red 49 (C. I. 15,630), 4.8 million pounds; pigment blue 15 (C. I. 74,160), 3.7 million pounds; pigment green 7 (C. I. 74,260), 2.8 million pounds; pigment red 3 (C. I. 12,120), 2.6 million pounds; pigment yellow 12 (C. I. 21,090), 2.3 million pounds; pigment red 48 (C. I. 15,865), 1.8 million pounds; the barium toners of pigment red 53 (C. I. 15,585), 1.4 million pounds; and pigment red 90 (C. I. 45,380), 1.3 million pounds.

Total production of less-than-full-strength colors (reduced toners and lakes) in 1959 was also larger than in 1958, but the percentage increase was smaller than for the full-strength colors. Production was 10.4 million pounds, compared with 9.3 million pounds in 1958—an increase of 11.8 percent. Sales amounted to 8.7 million pounds, valued at $11.3 million, compared with 8.3 million pounds, valued at $10.3 million, in 1958—an increase of 4.8 percent in terms of quantity and 9.7 percent in terms of value.

Sales of Dyes Up 13 Percent

Sales of dyes in 1959 amounted to 157 million pounds, valued at $203 million, as compared with 139 million pounds, valued at $177 million the year before. In terms of quantity, sales of dyes were 13 percent larger than in 1958 and in terms of value, 15 percent higher.

For many important low- and medium-priced dyes for which statistics are given in the report, production was larger in 1959 than in 1958 the Commission notes. Output of vat blue 1 (synthetic indigo) was 8.9 million pounds, or 14 percent more than the 7.8 million pounds reported in 1958; that of direct black 38 (direct black EW) was 5:9 million pounds, or 26 percent more than the 4.7 million pounds reported in 1958.

Production of mordant black 11 in 1959 (38 million pounds) was double that in 1958 (1.9 million pounds).

Other important dyes whose output was substantially higher in 1959 than in 1958 were: vat green 3 (69 percent larger); vat yellow 2 and vat black 25 (each 50 percent); direct yellow 6 (38 percent); mordant black 17 (30 percent); and acid black 1 (29 percent).

On the other hand, output of a few important dyes was smaller in 1959. Production of vat green 9 was 0.9 million pounds—36 percent less than the 1.4 million pounds reported for 1958; that of direct black 80 was 23 percent smaller; that of vat blue 6 was 9 percent smaller; and that of vat green 1 was 9 percent smaller.

Heyden Affiliate

—Continued from page 3

ties within strategic markets on the European continent."

Free Europe is expected to almost triple its synthetic rubber capacity in the next two years. New European synthetic rubber plants will boost 1962 production to an estimated 996 million pounds. In 1959, synthetic rubber production in the United Kingdom and on the continent topped 340 million pounds.

The catalyst, PMHP (para-menthane hydroperoxide) is used to control the polymerization rate in the production of styrene - butadiene rubber. PMHP is made from dipentene, a terpene hydrocarbon originating in naval stores manufacture. PMHP has been used in the United States since 1953 as a catalyst for both synthetic rubber and plastics.

'Curon' Plastics Line

—Continued from page 7

The plastics unit will now be operated as a major division of Reeves.

Since January, Reeves Brothers has been serving as sales agent to the apparel trades for "Curon." The company has been laminating "Curon" to fabrics on a job basis since last February.

Plans have been made to move the foam-making operation from Quehanna, Pa., to a plant at an unnamed location in the south which would be convenient to the furniture and carpeting industries, a spokesman for Reeves reports.

Bids Wanted

Acetylsalicylic Acid and Ethoheptazine Tablets, 1,376 bots. Bid RFB 7737Q, Sept. 6. Military Medical Supply Agency, 29th and 3rd Sts., Brooklyn 32, N. Y.

Alcohol, denatured, Grade III, formula SD-3A, in accord with Fed. Spec. O1E-760E with interim Amend-1, packed in 55 gal. drums. Estimated quantity 28,600 gals. IFB 61-16, Sept. 1. Open-end contract for a period of 12 months. US Army Chemical Procurement District, New York, 290 Broadway, New York 7, N. Y.

Antimony, 3,200 kg, with mm. 99.7 percent Sb. Bids invited until Sept. 9 by the Armament Department of the Imperial Iranian Army, DT Section, Avenue Jale, Tehran. Copies of bids, instructions and specification are available on loan from the Trade Development Division, Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D. C.

Calcium Carbide, 12 metric tons, offers in US dollars per 100 kilograms. C&F Khorramshahr invited until Oct. 9 by Armament Department of the Imperial Iranian Army DT Section, Avenue Jale, Tehran. Copies of bids, instructions, and specifications are available on loan from the Trade Development Division, Bureau of Foreign Commerce, US Department of Commer /asnington.

Herbicide, trichloroacetic acid, 90 percent by weight minimum of sodium salt, of trichloroacetic acid. Remainder inert ingredients. Powder form. Packed in drums containing 60 lbs. net contents. 350 drums estimated quantity. Bid IFB 61-19, Sept. 2. Open-end type contract for a period of one year from date of commencement. US Army Chemical Procurement District, New York, 290 Broadway, New York 7, N. Y.

Insecticide, DDT liquid form, packed in 55 gal. drums various quantities to various destinations. Bid IFB N140-50-61B, Sept. 6. **Insecticide,** aerosol, various quantities to various destinations. Bid IFB N140-52-61B, Sept. 6. US Navy Purchasing Office, Third Ave. and 29th St., Brooklyn 32, N. Y.

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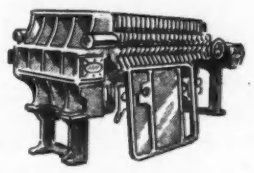

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Pittsburgh Lectro Dryers; Models BAC Size 25; BWC Size 3500.
Bowen Stainless Steel Laboratory Spray Dryer; 30" x 32".
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Mojonnier Stainless Steel Vacuum Pans; 3' x 10'; 6' x 12'.
3 Stainless Steel Vertical Pressure Vessels 42" x 10'; Dished Heads.

PLASTIC and RUBBER EQUIPMENT

Unused Farrel-Birmingham Late Type 2 Roll Mills 14" x 30"; Uni-Drives.
Other Rubber and Plastic Mills; 16" x 42"; 18" x 42"; 22" x 60".
Calendars 2 Roll 12" x 24", 15 HP; 3 Roll 22" x 58" Complete.
Extruders by NRM, Royle, Allen, electric or oil; several sizes.
Baker Perkins Heavy Duty Double Arm Mixers up to 300 Gal. in stock.
Hydraulic Presses 36" x 36" by Dunning & Boschert, Southwark, Others.
Stokes Aut. Molding Press No. 252; Tablet Presses by Stokes, & Colton.

FILTERS and FILTER PRESSES

Shriver and Sperry Filter Presses to 42" Cast Iron, Stainless, Ni-Resist, Aluminum.
Oliver Continuous Rotary Panel Type Vacuum Filters; 8' x 8' and 8' x 10'.
Feinc String Type Rotary Vacuum Filters 6' x 6' & 8' x 10'; Stainless contacts.
Bird Young Rotary Vacuum Filter, 4' x 4'. Sweetland Pressure Filters No. 2 to 12.
Enzinger Vertical Stainless Pressure Filter; 18" x 26"; ASME; 24 sq. ft.
Stainless Nutsche Type Filter 6' dia. x 2'. Bowser Filter w/Pump; 2000 GPH; 69 sq. ft.
Enzinger Leaf Type Filter; 48" x 57" Tank with 15 leaves; 360 sq. ft. surface.

MILLS—GRINDERS—PULVERIZERS

Abbe Jacketed Steel Ball Mills, 42" x 36" with charge of balls.
International Porcelain Lined, Ball Mill 8' x 8'; 50 HP Motor.
Patterson Jacketed Ball Mill, 54" x 42"; good for Vacuum.
Mikro Pulverizers; up to No. 4's. Mikro SS Atomizers Model 5 & 6.
Fitzpatrick Comminuting Mills, Stainless Steel; Models C, D, K.
Williams Hammer Mills to 16" x 48". Raymond Imp Mills; many models.
Williams Ring Roll Lab Mills, 3 Roll, 10" x 3"; complete.
American Ring Roll Crusher with 30" x 33" Throat 50 HP Motor.

RECENT DESIRABLE ADDITIONS TO THE FMC STOCK

Glass Lined Jacketed REACTORS; 50-60-100 gal. to 500 gal.
2 Stainless Steel 30" MICRONIZERS complete with accessories.
Sprout Waldron Rotary Cutter Model 1SB; 15 HP Motor.
Feinc Stainless Steel Rotary Vac. Filter 3'x1'; String Dis.
Laboratory STAINLESS Drum Dryer with Scraper; 2"x15".

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FMC

BRILL FOR VALUES

CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
1—Tolhurst 26" susp. Rubber Imperforate Basket.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

2—Glascote 750 gal. glass lined jacketed Reactors.
1—1200 gal. SS jacketed Kettle.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
1—700 sq. ft. Buflovak 304 SS forced circulation Evaporator.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# nickel coils.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—4000 gal. Haveg Vert. Tank 8'x12'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—1500 gal. Stainless Pressure Tank, 5'x10', 90#.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—Falls Industries 100 sq. ft. Karbate Condensor.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Oliver 3' x 2' 347 S.S. Rotary Vacuum Filter.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
1—Devine Vacuum Shelf with 19—59"x78" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'6" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 6'x25', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.
1—4' dia. 304 SS Spray Dryer.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 10 gal. jacketed 304 S.S. double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—Stokes 21K, 304 S.S. Granulating Mixer 82 gals.

MISCELLANEOUS

1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
2—1SH, 1SI Mikro, Pulverizers, 3 HP.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10' dia. Single Whizzer Separator.
1—#5 Mikro Atomizer with motor and cyclone.
2—Bantam Mikro Pulverizers, S.S.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.
1—#22 Rotex Sifter 40" x 56" double deck.
1—#81 Day Roball Sifter 40" x 120" single deck.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 6".

Partial List of Values — Send for Complete Circular

TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

JUST PURCHASED

2—Davenport 8' dia. x 60' long rotary dryers, 7/16" welded shell, internal flights, combus. chambers, fans, controls, burners, etc. Like new!

1—Louisville 7' x 70' rotary cooler or dryer, ½" welded shell, complete. 1952. Like new!

1—Patterson 6' dia. x 10' long porcelain lined pebble mill, jacketed. Like new!

DOUBLE ARM MIXERS

60—200 gal. Baker Perkins #17, sigma, blades jacket.
1—150 gal. Baker Perkins #16, sigma, jacket.
3—100 gal. Baker Perkins #15, sigma, jacket, 25 HP.
1—100 gal. Baker Perkins #15-uumm, dispersion blades, cored, 100 HP. compression cover, jacketed, motorized tilt.
1—100 gal. J. H. Day, stainless, sigma, 10 HP.
4—75 gal. J. H. Day Imp., disp. blades.
1—20 gal. J. H. Day, #2 Cinc., sigma, jacket.

CENTRIFUGALS—FILTERS

37—Sharples #AS-16V contin. cent., inconel.
3—Sharples #C-27 Super-D-Hydrators, T316 SS.
3—Sharples size #C-20 super-d-hydrators, T316 SS.
1—Tolhurst 48" dia. susp. batch centrif., T304 SS, perf., 15 HP.
6—A.T. & M. 40" dia. susp. batch centrif., T304 SS, HP.
1—26" Tolhurst susp. basket centrifugal, steel.
1—12" A.T. & M. susp., T304 SS perf. basket.
1—Niagara #510-28 T316 SS filter, 510 sq. ft.
1—Niagara #53-36, T304 SS filter, 53 sq. ft.
2—Sperry P. & F. filter presses, ni-resist, 210 sq. ft.
1—Kelly #50 steel press. filter, 50 sq. ft.
2—Sweetland #7 steel press. filters, 117 sq. ft.
1—Oliver 5'3" dia. x 8' face rot. vac. filter, precoat, unused.
2—Oliver 5'3" x 3' rot. vac. filters, T316 SS, precoat, ASME.
1—American 4' dia. rotary vacuum disc filter, 3-disc.

PEBBLE MILLS

1—Patterson 6' x 10', porox lined, jacketed.
2—Patterson 8' x 10', batch mills, buhrstone lined.
2—Hardinge 7' x 36" conical pebble mills, buhrstone lined.
1—Allis Chalmers 6' x 18' burhstone lined.
1—Crosley 6'8" x 7', batch mill silex stone lined.
13—Abbe Eng. 6' x 8', batch mills buhrstone lined, 30 HP.
1—Porter 6' x 5', batch mill buhrstone lined.
1—Abbe 5' x 6', batch mill buhrstone lined.
2—Patterson 4'6" x 12' contin., buhrstone lined.

DRYERS—EVAPORATORS

1—Mojonnier 1550 sq. ft. T304 SS evap., triple effect, sanitary, with preheaters, finishing pan, etc.
1—Buflovak 700 sq. ft. forced circulation evaporator, single effect, T304 SS. Late model—like new!
1—Struthers-Wells 630 sq. ft. T316 SS calandria type evap.
1—Buflovak 5' x 30' rotary vac. dryer, T316 SS, ASME.
1—Buflovak 3' x 7' rotary vac. dryer, T306 SS, ASME.
1—Stokes #59A, 18" x 42" rotary vac. dryer.
1—Buflovak vacuum shelf dryer, 227 sq. ft., lithcote lined.
2—Buflovak vac. shelf dryers; 110, 98 sq. ft.
1—Devine vac. shelf dryer, 80 sq. ft.—Unused.
2—Pilot size 4' dia. spray dryers, T304 SS, elec. heating.
1—Buflovak 42" x 120" double drum dryer, ASME, 125# wp.
1—Buflovak 42" x 90" double drum dryer, w/conveyors, etc.
1—American vacuum 36" x 84" double drum dryer.
1—Buflovak 5' x 12' single drum vacuum dryer—Unused.
1—Link-Belt #604-18 Roto-Louvre dryer, 6'4" x 18' long.
1—Link-Belt #310-20 Roto-Louvre dryer, 3'10" dia. x 20' long.
1—Standard 3' x 23' rot. dryer, 1/4" welded shell, flights.

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Type 316 Stainless Steel Equipment

7—Alloy Fabricators Type 316 SS pressure vessels, 4500 gals., complete with agitators and drives, 45 psi.
2—Alloy Fabricators Type 316 SS, 4500 gals., jacketed reactors, complete with agitators and drives.
2—Alloy Fabricators Type 316 SS, 1000 gals., jacketed kettles, ⅜" material throughout.
12—Whitlock Type 316 SS pressure vessels with coils, 270 gals.
3—Type 347 SS pressure vessels with coils, 300 gals.
3—Type 316 SS mixing tanks, 6000 gals., complete with agitators and drives.
8—Acme Type 347 SS settling tanks with cone bottoms, 1000 gals.
1—2600 gals., Type 316 SS vertical vacuum receiver.
3—Vertical Type 316 SS activated carbon absorbers, 5'4" dia. x 16'.
1—Struthers Wells Type 316 SS, 500 lbs. pressure vessel, 75 gals., ASME code, National Board.
2—Project Fabricators Type 316 SS vacuum receivers, 160 gals.
2—Pfaudler 500 gals., glass lined jacketed kettles.
1—Pfaudler 20 gals., glass lined vacuum receiver.
1—Haveg 500 gals., vacuum receiver.
2—Aluminum horiz. 5000 gals., storage tanks.
5—Pfaudler horiz. glass lined storage tanks, 5000 gals.
1—Pfaudler vertical glass lined storage tank, 5000 gals.
2—Rubber lined tanks, 2500 gals., working pressure 45 lbs.
4—Rubber lined horiz. storage tanks,5000 gals.,working pressure 45 lbs.
16—Rubber lined vertical storage tanks, 4500 gals., working pressure 45 lbs.
4—Patterson Kelley SS condensers, 500 sq. ft.
7—Stainless steel condensers from 50 to 300 sq. ft.
4—Stainless steel packed columns, 18" x 15'.
2—Shriver 18" x 18" SS plate and frame filter presses, 10 chambers.
5—Shriver 42" x 42" wood plate and frame filter presses, complete with hydraulic closing device, 30 chambers.
7—Buflovak Type 316 SS jacketed rotary vacuum dryers, 5' x 30', complete with 25 HP explosion proof motors and drives.
3—Type 316 SS Ter-Meer continuous type centrifuges 4' dia. bowls complete with motors.
3—Readco SS jacketed horiz. blenders, complete with explosion proof motors and drives.
3—Mikro #3TH SS pulverizers, complete with 40 HP explosion proof motors.
1—Mikro SS bantam pulverizer, Model CF, complete with 3/4 HP explosion proof motor.
3—Gruendler SS, lab size, pulverizers.
2—Nash, Model HS-6, Hastelloy B vacuum pumps, with 25 HP motors.
3—Nash, Model HS-6, Type 316 SS vacuum pumps, with 25 HP motors.
3—Nash, Model TS-12, vacuum pumps, with motors.
1—Stokes Type 316 SS, jacketed, rotary vacuum dryer, 2' x 3'.
14—Copper jacketed mixing kettles, 3500 gals. each.
14—Copper jacketed rotary vacuum dryers, 8' x 10'.
5—American Type 316 SS blowers, Model MD, size 27".
6—200 gals., Type 316 SS vacuum receivers.
1—Fuller Type 316 SS, airveying system.
1—Aldrich Type 316 SS hydraulic triplex pump, size 2-3/4"x4", 500 psi.
1—Quimby Type 316 SS twin screw pump with 10 HP variable speed drive.
2—Powell Type 316 SS 10" hydraulically operated flanged gate valves.
2—Tyler Type 38 tandem SS Hum-Mer screens, size 42" x 9'-8".
50—Stainless steel and aluminum hoppers, all sizes.
100—Stainless steel centrifugal pumps, all makes and sizes.
3—200 gals., Type 316 SS jacketed kettles.
12—Type 316 SS Cyclone separators, 5'-2" x 10'-8" overall.
500 Tons of Type 316 SS pipe, fittings and valves, ranging from 2" to 6".
500 Tons of structural steel.
12—125 HP vertical agitator drives with Philadelphia drive, output speed 15.
2—150 HP vertical agitator drives with Philadelphia drive, output speed 15.
16—40 HP horizontal drives.

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R. GELB & SONS, INC.
EST. 1886
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EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Buflovak stainless steel rotary vacuum dryer, 3' x 15'.

2—Struthers Wells type 316 SS 2000 gal. jacketed reactors, complete with agitators and drives.

2—Monel 2500 gal. jacketed autoclaves, 175# jacket, 175# internal.

2—Pfaudler glass lined jacketed reactors, complete with agitators and drives, 200 gals., each.

1—Nooter 100 gal. stainless steel reactor, complete with agitator and drive.

1—Struthers Wells type 316 SS 400 gal. reactor, complete with coils, agitator and drive, 250# coils.

1—Hersey stainless steel rotary dryer, 3' x 16'.

1—Allis Chalmers SS 6' x 50' rotary dryer complete.

2—Louisville stainless steel rotary dryers, 8' x 50'.

1—General American 7' x 40' rotary dryer, ⅜" welded shell.

1—Baker Perkins Size 4, laboratory mixer, sigma blades, 1 gal. total capacity.

1—Stewart Bolling 2 roll rubber mill, 6" dia. x 12".

1—Stainless Steel packed column, 18" x 9'.

4—Sperry stainless steel filter presses, P&F, 24" x 24", closed delivery, 12 chambers.

1—Niagara Stainless Steel filter, Model 510-28.

1—Richmond Engineering type 316 SS, 40 cu. ft., double ribbon blender.

10—Robinson stainless steel double ribbon blenders, 255 cu. ft.

1—Banbury #1 mixer, chrome plate rotors, complete with 50 HP motor.

1—Williams, "Comet" 4 roll mill, complete.

1—Baker Perkins double arm, jacketed, sigma blade mixer, Size 16 TRM, 150 gal.

25—Davis Engr. SS heat exchangers, 104, 121, 139 and 168 sq. ft., NEW.

1—Downington Type 316 SS heat exchangers, 750 sq. ft.

1—Cleveland SS double cone blender, 85 cu. ft. working capacity, complete with motor and drive.

1—Oliver SS rotary vacuum precoat filter, 3' x 4'.

1—Stokes #412F vacuum pump, complete with motor.

4—Tolhurst 40" rubber covered, center slung centrifuges, complete with perforate baskets and motors.

8—Western States 40" Type 316 SS, suspended type centrifuges, complete with perforate baskets, plows and 40 HP motors.

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UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

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9—80 gal. Stainless clad 40#.
6—60 gal. Stainless clad 40#.
5—40 gal. Stainless clad 40#.
5—40 gal. Stainless clad 40#.
3—20 gal. Stainless clad 40#.
18—Groen all Stainless. Many sizes.

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Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol., with 15 H.P. Unibrake Motor.
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1—Ball & Jewell #2 Cutter.
4—Link-Belt Vibrating Screens 4' x 8'.
1—Jeffrey Vibrating Conveyor.
1—30" Sperry Filter closed del., 3-eye, 39-plates, 40-frames.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor, 2-drums balls. Like new.
1—Schutz-O'Neill Pulverizer 22", Style D.
1—Abbe Pebble Mill 5' x 22'.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed.
1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
1—Bartlett Hog Mill with 7½ H.P. motor.
1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5" bore - 4" stroke, with 7-½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers 120 gal. jkt.
2—Aetna Water Stills 20 gph, new.

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DAY HY-R SPEED MILL 20 HP XP

CENTRIFUGALS—12" 30" 40" & 48".
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Devine 8 shelf Vac. Dryer 48" x 42".
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FILTER PRESSES—6" to 36" Iron & Wood.
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MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
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Hammer Mills & Pulverizers 3 to 50 HP.
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Rotary Cutters 1 HP & up.
Spr. Wald. Stainless Spike Crusher.
Pebble, Jar & Ball Mills, Lab to 6' x 8'.
3 Roll, 9" x 32", 12" x 30", 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack.
B. P. 15 HP—Masticator Mixer.
Day Imperial 75 & 150 gal.
Change Can Pony Mixers 8, 15 & 40.
Day Jumbo 700 gal. horiz. Mixer.
Sprout-Waldron 10,000# horiz. Spiral Mixer.
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 3000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
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TANKS—Stainless, GI Lined, Steel.

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1—Hercules 16" x 16" Stainless Steel Filter w 24 plates & frames.
4—Hercules 8" x 8" Stainless Steel Filters w/12 plates & frames.
5—Shriver #1 and "OO" Diaphragm Pumps.
1—Stainless Steel 30 gal. Autoclave 1000 psi w Jacket & Agitator w/XP Motor.
1—Cyclotherm Package Boiler 250 psi, 600# hr.
4—Stainless Vacuum Receivers 50 to 100 gals.
8—Jack. Stainless Kettles 75 to 100 gals. and 200 gals. closed.
1—Horiz. Spiral Mixer, 3' x 12', Jacketed.
3—Spiral Blenders 800 to 2000#.
1—Patterson 5' x 6' Jack. Ball Mill 25 H.P.
1—Raymond #3036—3 Roll High Side Mill.
2—Stainless Tanks 500 & 600 gals.
1—Stokes Drying Cab. #38—16 shelves.
1—Elgin S.S. 2 Piston Filler.
1—O & T—40 gal. Pony Mixer.
1—N. J. MX Pony Labeler.

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4—30" Sperry Filter Presses, 32 Chambers, NICKEL or NI-RESIST Plates.

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2—Rietz Disintegrators, Model RD-18-P, 75HP.—3/60/440.

1—Whitlock #17 STAINLESS Heat Exchanger, Type S, Two Pass, "304" ⅝" tubes, 60# press., Steel Shell, Wgt. 1,700#.

8—Baker-Perkins Vissolvers, Size 2-G, 950 Gals., 30 HP Motor—Falk Reducer Drives.

1—Griscom-Russell STAINLESS Heat Exchanger, 1" x 18 ga. Tubes, type 304, 16" dia. tube Bundle, Wgt. 2,000# Steel Shell.

1—375 Sq. Ft. Patterson Kelly STAINLESS Heat Exchanger, 1953 built, Steel Shell, 2" Tubes, 300# Shell pressure, 75# tube press.

6—98, 134, 175 and 635 Sq. Ft. Ross Steel Heat Exchangers, ⅝" to 1-¼" tubes, 50, 65, and 100# pressures.

ALSO:
12 Viking Pumps, 6 Gearmotors, 15 Centrifugal Pumps, & Splashproof Motors, (7-½ HP). 6—10 HP Gearmotors, 4—3" x 3" Viking Pumps (only), 8 Nickel & Hi-Ni-Alloy Pumps & Motors & Numerous Other Items.

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Connection with investor wanted by chemist, Ph.D. willing to finance exclusively the foundation and operation of a small chemical plant manufacturing surfactants and related chemical specialities. OPD 117.

DISTRIBUTORSHIP WANTED

Our company has long established national sales representation to the paint, plastic, printing ink and other protective and decorative coatings industries. We want additional items on exclusive basis. We are willing to make a substantial investment if necessary. OPD 116.

EQUIPMENT OFFERED

1 Worthington 8" x 6" vacuum pump, reciprocating type—belt driven—150 cubic ft., displacement with 5 h.p. motor. Write OPD 113.

Mixing Tank—S.S. 500 Gal.
2—Baker Perkins Stainless Steel, 2 arm, jacketed, vacuum, hydraulic tilt, 150 gal—40 HP, 100 gal—50 HP.
Stokes Tablet Press—R
Kettle—20 Gal. Lead Lined.
1—1000 gal. type 316 Pfaudler not jacketed.
Stainless Steel Ball Mill.

MACHINECRAFT CORP.
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

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1 Clayton 60 h.p. steam generator, fully equipped and automatic—oil-fired—100 lbs. steam pressure. Write OPD 114.

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Tax Relief Bill Chances Are Said to Be Sinking

Hopes flickered briefly last week for the bill to provide tax relief for US businessmen investing abroad (HR 5), but the prospects for the legislation getting through before congress adjourns are now considered to be very dim.

This gloomy appraisal comes from supporters of the measure following a short session of the senate finance committee, which asked the Treasury for a definitive statement on its position regarding the legislation.

Treasury has come out neither flatly for nor against the bill, which would allow newly-created US foreign corporations to defer tax payments on income earned from investment in under-developed areas abroad.

Since the Treasury's answer will require time for drafting, chances are less than fifty-fifty that the committee will take action on the bill this session. The odds are even slimmer than that for senate approval, even if the committee should get to the measure in time.

Plastics for Medicine

—Continued from page 5

sions offer a larger market for plastics products than a lot of marketing people would suspect":

- Surgical sutures, a seemingly minor product among heavyweights of the plastics industry, sold at a rate of $29 million annually in 1958, up a whopping 52 percent over the 1954 level. Synthetic sutures made from nylon, high density polyethylene or polyester fiber, represent close to 30 percent of this business.
- Production of hypodermic syringes increased 85 percent between 1954 and 1958, totaling 19.6 million units in the latter year, valued at $14.4 million. The figure for 1960 is expected to hit 28 million units.
- In the dental field, annual production of plastic teeth is steadily increasing while that of porcelain teeth is on the decline. Today, an estimated 25 percent of all artificial dentures produced annually are plastics, usually methylmethacrylate, as against only 19 percent in 1954. The market for the end product amounts to about $4.5 million annually.

Surgical tape production—this is where companies like 3M come into the picture—is valued at some $60 million a year, about 15 percent of which is vinyl-backed.

Adding up these four outlets, Chemical Marketing & Research Company comes up with a total production value of $25 million and calls it a conservative figure.

Dollar Value Is High

"The purpose of these statistics," the consulting company states, "is to point out that plastics medical and dental products have a high dollar value worthy of many plastics manufacturers' sales efforts and may be a sleeper among plastics end-use items."

There are many more examples: artificial limbs and other body parts, implants, membranes, bone repair material, contact lenses, surgical drapes, flexible tubing, disposable items such as polyethylene gloves and catheters, heart-lung machines, dentures, removable bridges.

A favorable market climate and the prospect of earning public good will by participating in the fields that serve the nation's health needs are some of the prizes which the survey finds will lure more and more plastics makers into medical and dental lines.

3M and Warner-Lamber have reportedly reached tentative agreement on their merger plans. Under the agreement, still subject to approval by directors and shareholders of both companies, one share of the pharmaceutical company's common stock would be exchanged for one-half share of 3M common plus one share of a special Class A voting stock still to be authorized.

Minnesota Mining produces adhesives, abrasives, magnetic and insulating tapes and has a hand in many unrelated manufacturing enterprises. The company's volume last year was estimated at $690 million.

Warner-Lambert's sales last year totaled $190 million.

Celanese Covers Bet

—Continued from page 5

Celanese says, will serve the increasing demand for nylon tire cord by the Mexican tire industry.

Celanese Mexicana has made arrangements with Firestone Tire & Rubber Company for the process and equipment design and for continuing technical assistance. Firestone produces nylon and nylon tire cord at plants in Hopewell, Va., and Gastonia, N.C.

With six plants and 4,000 employees, Celanese Mexicana currently produces twenty-nine basic, semi-finished and finished products for the chemical, plastics and fiber industries. The company says it will continue to manufacture high-tenacity rayon tire cord and fabric.

Monsanto on Market With Growth Regulator

Monsanto Chemical Company is marketing a new growth regulator which can save apple growers the $8 million yearly now lost to the ravages of common scald, the company says.

Scald, a non-parasitic disease, is said to be the single most serious storage hazard in the apple industry. It causes a brown discoloration and softening of the fruit's skin.

Trade-named "Stop Scald," Monsanto's regulator is being sold under the St. Louis, Mo., company's own label following clearances of the compound as safe and effective for this use by the appropriate federal agencies.

A post-harvest spray or dip containing as little as two pints of "Stop Scald" to 100 gallons of water is said to be sufficient to prevent the disease in all commonly susceptible varieties of apples.

Current Market Quotations

—Continued from page 33

Zinc dust coml. bbls., c.l., works	lb.	.17 -	—
Pigment, bbls., c.l., works	lb.	.16½-	—
bbls., l.c.l., works	lb.	.18¼-	—
Zinc fluoride, bbls., works	lb.	.49 -	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½-	—
dms., l.c.l., frt. alld.	lb.	.23½-	—
Zinc metal prime western, slabs, E. St. Louis	lb	.13 -	—
Prime western slabs, New York.	lb.	.13½-	—
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27 -	—
10% Zn., dms., frt. alld.	lb.	.33 -	—
Zinc nitrate tech. cryst., bbls., works	lb.	.20 -	—
Zinc oxide, pigment, American process, lead-free bgs., c.l., frt. alld	lb	.14½-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15 -	—
bgs., l.c.l., smaller lots, same basis	lb.	.15½-	—
leaded, 35% bgs, c.l., mills, frt. alld	lb.	.15⅝-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15⅞-	—
Zinc oxide, leaded, 50%, bgs., c.l., same basis	lb.	.15¾-	—
Zinc oxide, pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼-	—
USP, gran., dms.	lb.	.26 -	—
French process, green seal, bgs., c.l., mills, frt alld	lb.	.16¼-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	16¾-	—
bgs., l.c.l, smaller lots, same basis	lb.	.17¼-	—
red seal, bgs., c.l., same basis.	lb.	.15¾-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼-	—
bgs., l.c.l, smaller lots, same basis	lb.	16¾-	—
white seal, bgs., c.l., same basis	lb	.16¾-	—
bgs., l.c.l., 10 tons or more, same basis	lb	.17¼-	—
bgs., l.c.l., smaller lots, same basis	lb	.17¾-	—
Zinc oxide, USP dms., c.l., frt. alld.	lb.	.18¼-	—
dms., l.c.l., 10 tons or more, same basis	lb	.18¾-	—
dms., l.c.l., smaller lots, same basis	lb.	.19¼-	—
Zinc phenolsulfonate, NF, gran.,	dms	lb.	.45 - .48
NF, powd., dms.	lb.	.48 - .49	
Zinc resinate, precip, 7.2-7.6% Zn., dms., frt. alld	lb.	.40¼-	—
Zinc silicofluoride, dms., works	lb.	.12½-	.14
Zinc stearate, tech., USP, ctns., c.l.	lb.	.41 -	—
ctns., l.c.l.	lb.	.42 -	.46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.	100 lbs.	8.75 -	—
bgs., l.c.l., dlvd. E.	100 lbs.	9.75 -	—
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530-	—
Zinc undecylenate, dms.	lb.	2.00 -	—
Zinc, yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25 -	—
bbls., c.l., works	100 lbs.	10.85 -	—
bbls., l.c.l., works	100 lbs.	11.35 -	—
Zinc formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26 -	—
Normal, 250-lb. dms., frt. alld	lb.	.52 -	—
Zircon (G) gran., bgs., c.l., works.	lb.	.03½-	—
bgs., 5 tons to c.l., works	lb.	.03⅝-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04 -	—
bgs., smaller lots, works	lb.	.06½-	—
Zircon (G), milled, bgs., c.l., works.	lb.	.04½-	—
bgs., 5 tons to c.l., works	lb.	.04⅝-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝-	—
bgs., 500-1,999-lb. lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23 -	—
Zirconium hydride, powd., electronic grade, dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50 -	—
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½-	—
bgs., smaller lots, works	lb.	.51 -	—
milled, bgs., c.l., works	lb.	.62 -	—
bgs., 5-ton lots, works	lb.	.62½-	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½-	—
bgs., 500 to 1,999-lb. lots, works	lb.	.64 -	—
bgs., smaller lots, works	lb.	.66 -	—
Zirconium Oxide.			
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55 -	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.37 -	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 -	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½-	—
bgs., l.c.l., smaller lots, same basis	lb.	.16¾-	—

Advertisers' Index

Acme Hardesty Co. ... 58
Allied Chemical Corporation—Plastics & Coal Chemicals Division ... 40
American Casein Company ... 53
American Cyanamid Company, Fine Chemicals Department ... 15
American Firstoline Corporation ... 36
American Lignite Products Co. ... 55
Archer-Daniels-Midland Company, Chemical Products Division ... 56
Argueso, M., & Co., Inc. ... 56
Armour Pharmaceutical Company ... 46
Ashcraft-Wilkinson Co. ... 43

Baker, J. T., Chemical Co. ... 1
Barclay Chemical Company, Inc. ... 62
Becco Chemical Division, Food Machinery & Chemical Corp. ... 35, 39
Berkshire Chemicals, Inc. ... 36
Bios Laboratories, Inc. ... 47
Blockson Chemical Company ... 36
Bower, Henry, Chemical Mfg. Co. ... 36
Bowman, Charles, & Co. ... 47
Brill Equipment Company ... 59
Brode Corporation, The ... 56

Celanese Corporation of America, Chemical Division ... 19, 64
Chemical Manufacturing Co., Inc. ... 37
Chemical & Process Machinery Corp. ... 58
Chemical Service Corp. ... 62
Chemical Solvents, Inc. ... 64
Chemsol, Inc. ... 62
Columbia Southern Chemical Corporation ... 31, 34
Commercial Solvents Corporation ... 13
Concord Chemical Company ... 64
Conray Products Co., Division Chemical Service Corp. ... 47
Coupe, Robert A. ... 36
Cowles Chemical Company ... 29

Dicalite Department, Great Lakes Carbon Corporation ... 16, 17
Diehl, Wm., & Co. ... 56
Distillation Products Industries, Div. of Eastman Kodak Company ... 45
Dow Chemical Company, The ... 34, 41
Drum Parts, Inc. ... 41
DuPont de Nemours, E. I., & Co., (Inc.) ... 1, 42
Duval Sulphur & Potash Co. ... 43

Eastman Chemical Products, Inc. ... 20
Emery Industries, Inc. ... 55
Equipment Clearing House, Inc. ... 58

Fairmount Chemical Co., Inc. ... 47
First Machinery Corp. ... 59
Florasynth Laboratories, Inc. ... 48
Food Machinery & Chemical Corporation Mineral Products Division ... 2
Freeport Sulphur Company ... 43
Fritzsche Brothers, Inc. ... 48
Frontier Chemical Company ... 39

Gelb, R., & Sons, Inc. ... 60, 61
Greeff, R. W., & Co. ... 32
Gulf Oil Corporation ... 39

Harchem Division, Wallace & Tiernan, Inc. ... 55
Harshaw Chemical Co., The ... 57
Heat & Power Co., Inc. ... 58
Heico, Inc. ... 36
Hoffmann-La Roche, Inc. ... 33
Hooker Chemical Corporation ... 35
Humble Oil & Refining Company, Penola Division ... 51
Hutchinson, D. W., & Co., Inc. ... 43

Industrial Molasses Corporation ... 38
Interlake Iron Corporation, Coal Chemicals Division ... 41
International Petrosolvents, Inc. ... 39

Lawler Company ... 58
Lebanon Chemical Co. ... 43
Lemke, B. L., & Co., Inc. ... 46
Lever Brothers Company ... 33
Loeb, H., & Son ... 61
Loeb Equipment Supply Co. ... 58
Lucidol Division, Wallace & Tiernan, Incorporated ... 57

Machinecraft Corp. ... 58, 62
Machinery & Equipment Company ... 58, 61, 62
Machinery & Equipment Co., The ... 61
Magnus, Mabee & Reynard, Inc. ... 48
Mantrose Corporation, The ... 53
Meer Corporation ... 44
Merck & Co., Inc. ... 25
Miles Chemical Company Division, Miles Laboratories, Inc. ... 44
Millmaster Chemical Corporation ... 64
Minute Maid Corporation, Citrus Products Division ... 49
Mississippi Lime Company ... 37
Montrose Chemical Company ... 32
Mutual Citrus Products Company ... 23

Neville Chemical Company ... 64
NYQ Chemical Division, S. B. Penick & Company ... 6

Olin Mathieson Chemical Corporation Chemicals Division ... 18
Oronite Chemical Company ... 21

Page, Charles, & Co., Inc. ... 41
Pan American Sulphur Company ... 36
Penick, S. B., & Company ... 48
Pennsalt Chemicals Corporation, Industrial Division ... 1
Perry Equipment Corp. ... 60
Petro-Tex Chemical Corporation ... 8
Pfaltz & Bauer, Inc. ... 46
Philipp Brothers Chemicals, Inc. ... 35
Pitt-Consol Chemical Co. ... 27
Plastics and Coal Chemicals Division, Allied Chemical Corporation ... 40
Polak's Frutal Works, Inc. (PFW) ... 50
Prior Chemical Corporation ... 1
Process Plants Service, Inc. ... 58
Procter & Gamble Co. ... 38
Publicker Industries, Inc. ... 11

Raney Catalyst Co. ... 38
Read, Chas. L., & Co., Inc. ... 62
Republic Steel Corporation ... 43
Riches-Nelson, Inc. ... 64
Richter, Gedeon Pharmaceutical Products, Inc. ... 47
Rosenthal's, Joseph, Sons, Inc. ... 61
Ross, F. H., & Co. ... 34

St. Joseph Lead Co. ... 52
Sergeant, E. M., Pulp & Chemical Co., Inc. ... 64
Shell Oil Company ... 51
Stauffer Chemical Company ... 37
Stein Equipment Co. ... 61
Sunkist Growers, Inc. ... 22
Synthetic Products Company ... 52

Union Carbide Chemicals Company, Division of Union Carbide Corporation ... 1
U. S. Borax & Chemical Corporation ... 1
U. S. Steel Corp. ... 42
United Ultramarine & Chemical Company, Inc. ... 53

van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. ... 50
Vanderbilt, R. T., Co., Inc. ... 52

Welch, Holme & Clark Company, Inc. ... 56
West End Chemical Company, Division of Stauffer Chemical Company ... 28
Wolf, Bill, Inc. ... 58
Wood Ridge Chemical Corporation ... 62
Wyandotte Chemicals Corporation ... 36

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Bureau of Mines Starts Phosphate Rock Research

Bureau of Mines researchers are working on planer mining methods and recovery techniques for phosphate rock. They are also looking into the feasibility of using a statistical approach in estimating phosphate reserves.

A redesigned phosphate rock planer will be field-tested in cooperation with producing companies in the western phosphate rock field of Idaho, Montana, Utah and Wyoming. The bureau will also study ground control problems of longwall mining.

Meanwhile, other bureau researchers will study beneficiation methods aimed at upgrading phosphate rock of the western field. The phosphatic slime problem in Florida and Tennessee also is scheduled for bureau study. Product development and improved disposal are included in the investigation.

Through a cooperative program with a producing company, the bureau will determine if statistical analysis of sample data is applicable to phosphate rock. If this approach proves feasible, the bureau then plans to develop guides for sampling and exploration programs.

The bureau's research on the phosphate rock planer will be centered at Spokane, Wash.; beneficiation tests on western phosphate rock will be conducted at Albany, Ore., and those on phosphate rock slimes at Tuscaloosa, Ala. The statistical analysis project will be at Denver, Colo.

'Pep Pills' Pelted by FDA

—*Continued from page 5*

Taken without medical supervision, amphetamines can result in excessive nervous stimulation, loss of desire for sleep, gastrointestinal disturbances, impairment of judgment, hallucinations and mental derangement.

The drugs may also have adverse reactions in certain conditions such as high blood pressure, heart disease and diabetes.

For these reasons, Mr. Larrick points out, the federal food, drug and cosmetic act bans the dispensing of amphetamines without a doctor's prescription.

"While truck drivers represent the largest group identified as users of these drugs," he says, "we do know that there are others who are using them without the benefit of medical supervision."

Illegal Markup Is Fantastic

That the bootlegging of "bennies" is a highly profitable racket is indicated by the fact that amphetamines, which can be bought wholesale for as little as $2 a thousand tablets, often sell for $1 a dozen.

What's to be done about the problem? The FDA Commissioner believes that the current drug law needs strengthening.

In the eighty-fifth (1956-1958) congress, Department of Health, Education & Welfare supported a bill which would:

- Make the unauthorized manufacture, dealing in or possession of the drugs an offense under the federal law, regardless of whether the drugs are from interstate or intrastate sources.
- Require all manufacturers, compounders and processors of these drugs to be listed with FDA.
- Require all those who are engaged in making, processing or dealing in such drugs to keep records of their production and dealings in them and to make these records available to FDA inspectors.

The measure, however, got nowhere in congress. To get things moving again, Mr. Larrick says the administration is now thinking of sending up another such bill to Capitol Hill.

Meanwhile, Rep. Newell A. George of Kansas has introduced legislation (HR 13035) to regulate the manufacture, compounding, processing, distribution and possession of habit-forming barbiturates and amphetamine drugs.

The measure, which has been referred to the house commerce committee, was submittted independently of FDA and is not the legislative proposal referred to by Mr. Larrick.

Imports at US Ports

—*Continued from page 54*

PEATMOSS—1,500 bls, Chase Manhattan Bank, Gdynia
600 bls, New Amsterdam Import Co, Bremen
500 bls, E Dunwoody, Bremen
950 bls, Keer Maurer, Bremen
950 bls, Premier Peatmoss Corp, Hamburg
PETROLEUM, CRUDE—150,761 bbls, Gulf Oil Corp, Bachaquero
263,138 bbls, Gulf Oil Corp, Bandar Mashur
310,642 bbls, Gulf Oil Corp, Puerto La Cruz
94,648 tons, Gulf Oil Corp, Mina Al Ahmadi
137,460 bbls, Continental Oil Co, San Lorenzo
134,219 bbls, Atlantic Refining Co, Pama Tacual
254,716 bbls, Atlantic Refining So La Salina
198,961 bbls, Mobil Oil Co, Covenas
223,963 bbls, Texaco Co, Covenas
PYROPHILLITE—3,300 tons, American Ecaustic Tiling Co, Long Pond
RUTILE SAND—1,000 bgs, Frank Samuel & Co, Brisbane
SODIUM ANTIMONATE — 1,000 bgs, Pigment & Chemical Co, Hamburg
VANILLA BEANS—69 cs, Camax Co, Vera Cruz

San Francisco

AMMONIUM CHLORIDE—200 bgs, C M C Chemicals, Manchester
40 bgs, Antwerp
AMMONIUM SILICOFLUORIDE—60 bgs, D M Hicks, Amsterdam
BRONZE POWDER—40 dms, Wedeman & Godknecht, Manchester
CARAWAY SEED—100 bgs, B C Ireland, Amsterdam
CASEIN—450 bgs, J R Spellacy, Sydney
CORN STARCH—800 bgs, H M Newhall & Co, Bremen
DEGRAS—100 dms, N I Malmstrom, Manchester
DEXTRIN—400 bgs, Arabol Manufacturing Co, Amsterdam
40 bgs, Morgan Guaranty Trust Co, Amsterdam
FISHMEAL—3,261 bgs, Chimbote
MINERAL WAX—200 bgs, Hamburg
PEATMOSS—600 bls, Atkins Kroll & Co, Bremen
300 bls, Nurserymens Exchange, Bremen
PEPPER, BLACK—160 bgs, Hong Kong
420 bgs, Singapore
PETROLEUM, CRUDE—225,015 bbls, Standard Oil Co, Dumai
121,371 bbls, Shell Oil Co, Punta Cardon
POLYVINYL ALCOHOL—40 bgs, Maurbeni Iida Co, Kobe
SAGE LEAVES—100 bls, H M Newhall & Co, Bremen
SEEDLAC—125 bgs, H M Newhall & Co, Bangkok
200 bgs, East Asiatic Co, Bangkok
SODIUM BICARBONATE—600 bgs, C M C Chemicals, Manchester
SODIUM CYANIDE—400 dms, C M C Chemicals, Manchester
SODIUM SILICOFLUORIDE—100 bgs, D M Hicks, Amsterdam
TRICHLOROETHYLENE—44 dms, C M C Chemicals, Manchester
ZIRCON SAND—1,000 bgs, Brisbane

Soda-Ash Corseted by Cost-Price Squeeze

—*Continued from page 5*

For a seventeenfold growth, chlorine needed only 30 years. Soda ash, on the other hand, needed 70 years for the same expansion, reaching a total world output of 14.4 million metric tons in 1959.

This draggy development of soda ash has several major causes. Once, ash was in competition with caustic soda in many areas, including soap, detergents, paper, cellulose, chemicals, metallurgy and the like, where either could be used virtually interchangeably.

The sharp rise of caustic soda output from electrolysis (because of booming demand for caustic's co-product, chlorine) has had little to do with actual needs for caustic itself. Hence, chlorine is usually the product in demand and caustic has to go begging.

As a result, competition between caustic and soda ash intensifies when the price differential between the two narrows.

Lime-Caustic Process Declined

Then too, because output of electrolytic caustic has risen sharply, the production of soda ash for use in making caustic via the lime-soda process has declined. In the US, lime-soda caustic dropped from 51 percent of total caustic produced in 1939 to 7 percent last year.

In West Germany, the percentage of caustic derived from soda ash fell from 28.7 percent in 1950 to 11.2 percent in 1959. Similar drops can be seen in any country where electrolytic caustic-chlorine facilities have been pushed.

Further, use of soda ash in the soap and detergent field has undergone radical change. The almost unrestricted use of ash for production of various cleaning agents has been hit hard during the last twenty years by breakthroughs in synthetic detergents.

The detergents have turned to polyphosphates as builders—particularly sodium tripolyphosphate—which are preferred chiefly because of their affinity for calcium, not to mention cleaning, emulsifying, sequestering and other characteristics.

Tripoly output in the US in 1959 hit 667,632 short tons, for which close to 500,000 tons of soda ash was used, or roughly 10 percent of total ash output here. Use of soda ash for this same purpose in 1950 was 5 percent of the total output, or around 200,000 short tons.

Other dislocations have occurred in soda ash's end-use pattern so that losses have been offset by gains. Things were so discouraging, in the early fifties, however, that a rather stagnant plateau was reached, and little was done about expansion.

Feeling then was that in the US and the world as well, there was more than enough capacity to handle all needs. But booming business in the last couple of years has jarred the industry off its mark, and new expansion plans are in the making.

On a worldwide basis, the greatest single use for soda ash is in the glass industry, consuming around 35-4 percent of all output. Some 25-30 percent goes into chemical production; about 10 percent goes into soaps and detergents; the remainder into paper, cellulose, chemical fibers, pharmaceuticals and so on.

There's little doubt where this country stands as far as production capacity is concerned. Our daily rated capacity of 19,500 tons in 1960 is well over three times that of the Soviet Union, which is in second place, followed by Great Britain, the largest West European maker.

West Europe's Share

Western European share of world output has declined in the last five years from 31.4 percent to 29.7 percent. At the same time, production in this area has gone up well over 8 percent.

While the decline is significant, it must be noted that production growth at the same time is still stronger in Western Europe than in the US, since our share of th world soda ash market has shrunk from 40.9 percent in 1955 to a little over 37 percent in 1959, and our output has risen only about 2 percent.

On the other hand, Eastern Europe during the same period 1955-59 shows an increase of 35.9 percent, or around 7.2 percent per annum. In this time, the iron curtain countries have expanded their share of world output from 17.5 percent to 21.2 percent. Throw in Red China, and the communist countries show a growth rate of 8 percent annually, and a world market share of 25.6 percent in 1959.

Leading the way in eastern European soda ash development are Yugoslavia, Rumania and Poland, which have more than doubled output in five years.

Bulgaria have gained more than 47 percent; the Soviet Union is up 24.5 percent, East Germany is up almost 22 percent, and only Czechoslovakia has failed to really get moving.

Importance of ECM

Of the two trade blocs in Western Europe, European Common Market is more important than the European Free Trade Area, producing about half again as much soda ash.

Growth rate for soda ash in 1959 for ECM was around 2 percent a year, compared with 1.1 percent per annum for EFTA countries.

In Asia, Japan is the leading producer, but since 1955 its share of the total Far Eastern market has declined rapidly until in 1959, it produced little more than half.

Reason is that rapidly-rising Red Chinese output brought its share from 34.9 percent in 1955 to 42.1 percent in 1959. In the foreseeable future, China will undoubtedly overtake Japan.

Thus with expanding production overseas and the cost-price squeeze dictating against expansion of synthetic soda ash plants here, US producers will be hard-put to keep pace. Perhaps the answer lies in the deposits of trona in Wyoming.

This article on soda ash is the concluding of two reports on the world alkali outlook. Last week, OPD reviewed the international chlorine-caustic soda situation.

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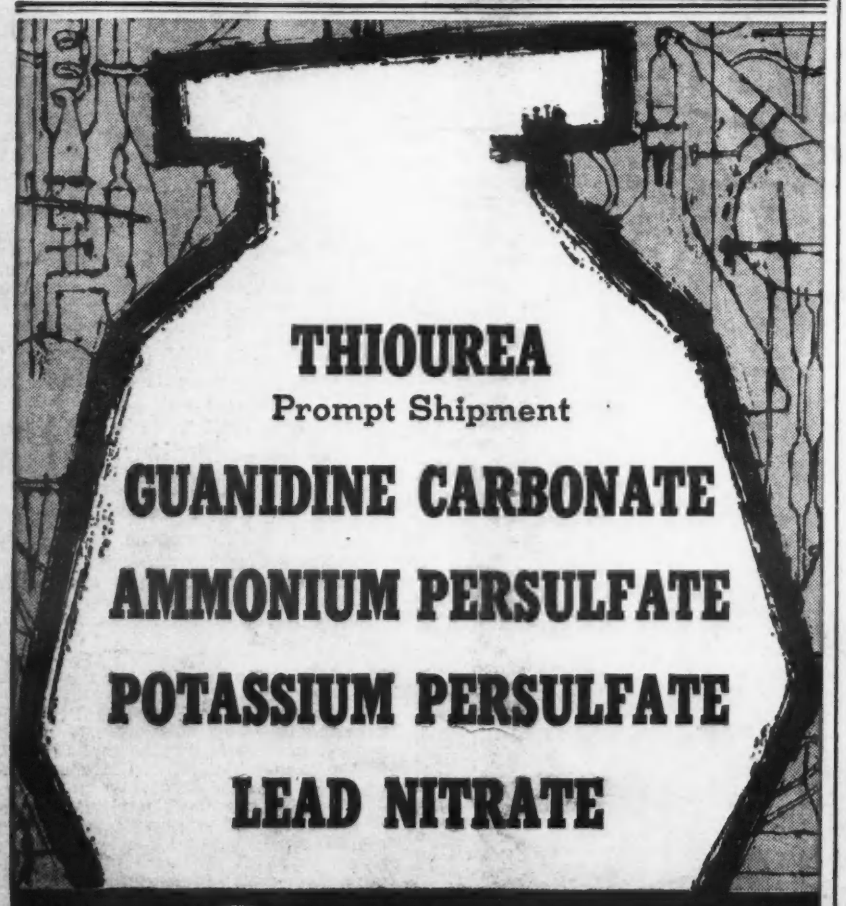

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